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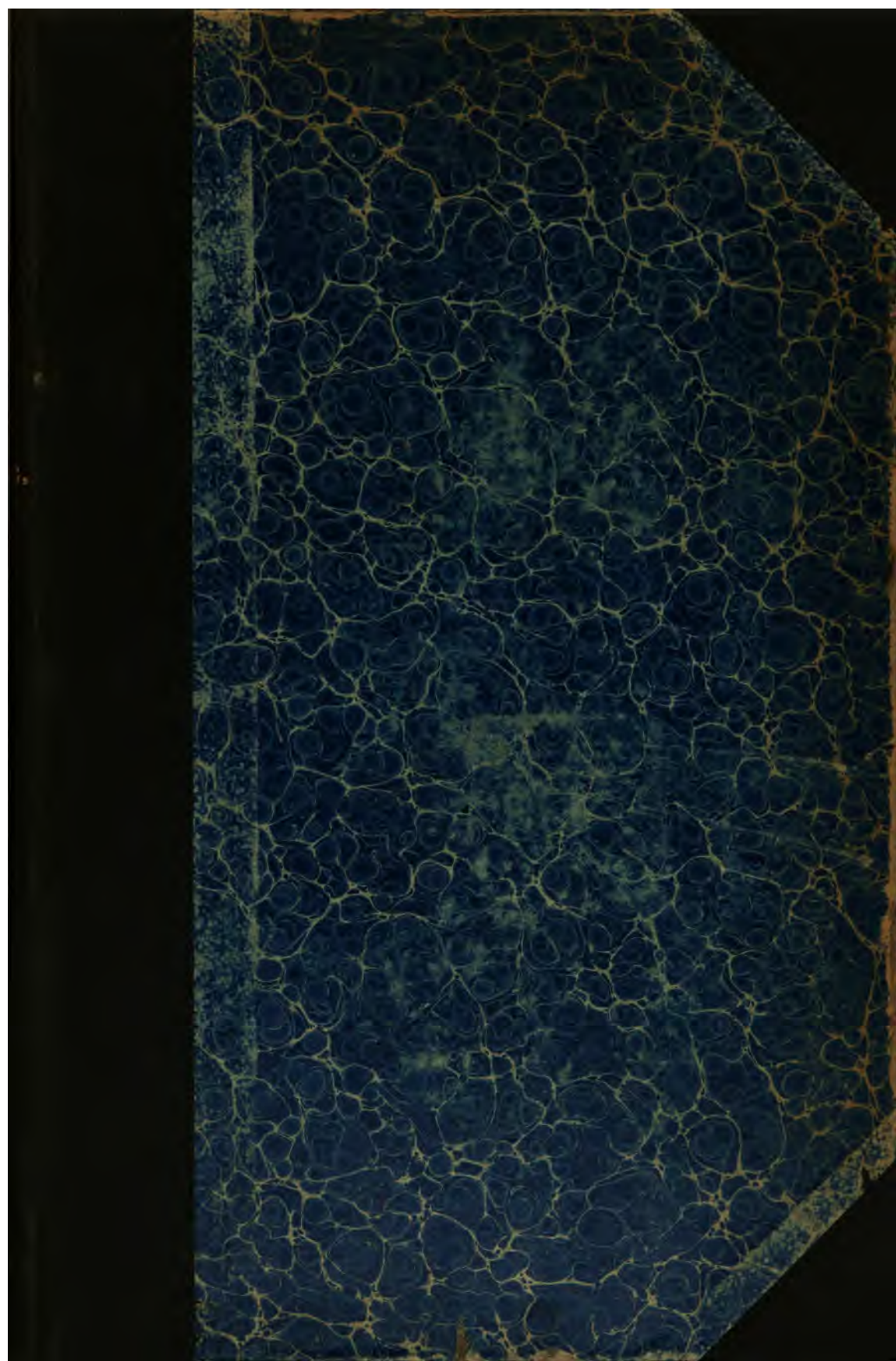
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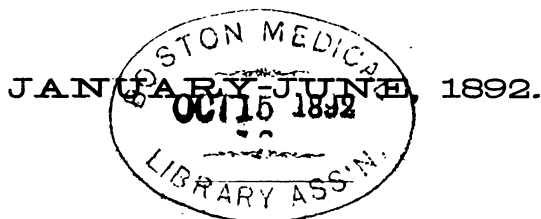


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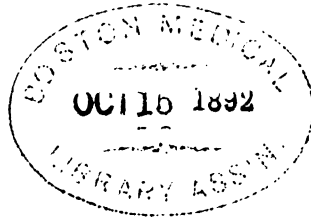
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Original Contributions.

BICHLORIDE OF METHYLENE USED IN A JUNKER'S INHALER. By
JNO. H. MCINTYRE, A.M., M.D., St. Louis, Mo.

Quite recently I have received a perfect deluge of letters from all over the country, making inquiries in regard to my experience with this anæsthetic. It is the object of this paper, briefly, to answer them through the medium of this journal.

In the ST. LOUIS MEDICAL AND SURGICAL JOURNAL, of October, 1883, I reported a carefully prepared article, setting forth its advantages. I had at that time used it in about fifty cases. Since that time I have used it, not only in all major operations, but exclusively as an anæsthetic in all my laparotomy work, many times putting it to as severe a test as it is possible to put an anæsthetic.

During the early part of my career, and while an army surgeon on duty in large military hospitals, I had an enormous experience with chloroform and ether, and many times witnessed the nausea and vomiting, to say nothing of the "close calls," which their use occasioned. So, when I witnessed the administration of bichloride of methylene in the operations of Sir Spencer Wells and others (1879), I was fully prepared to appreciate the absence of many unpleasant complications. I have now used it in nearly four hundred operations, without a single untoward symptom, and, while I have seen nausea many times less than would be occasioned by ether or chloroform, I have witnessed vomiting less than a

dozen times. Sir Spencer Wells (1877) declared that after ten years' experience of its use, he believed it "to be without a single exception applicable to every patient, perfectly certain to produce complete anæsthesia, relieving the surgeon from all alarm and even anxiety; and its use has never been followed by any dangerous symptoms which could be fairly attributed to it."

Mr. Morgan reported in the *British Med. Journal*, Jan. 4, 1879, an experience of its use in eighteen hundred cases, without a single accident.

That death *may* be produced by an agent as potent as this, no one for a moment will deny; but the record of bichloride of methylene, when used in a proper inhaler, as compared to chloroform, for safety, is a most brilliant one. Indeed, to the careful reader of the current medical literature of the day, it is startling to note the oft-repeated report of "another death from chloroform."

The first fatal case arising from the administration of bichloride of methylene occurred in Charing Cross Hospital, London, in October, 1869, and at the time of my report above referred to (1883) I knew of but eleven cases of death from this agent. Since that time, I have carefully watched the medical journals for reports on this subject, and have heard of but a single case, and that one occurred in the practice of an English surgeon. So, I know of but twelve cases of death occurring from this agent up to the present time. In these fatal cases, the methylene was administered either from a leather cone, on lint, or flannel cloth, or while the patient was in a sitting position, so that the manner of its administration did not favor a uniform rate of inhalation, and a uniform saturation of the air that was passed into the lungs, and also that the position of the patient was such that the risks of syncope were not reduced to the minimum by favoring the access of blood to the brain. It is only surprising, therefore, that a larger number of fatal cases have not occurred.

This agent was discovered in the year 1840, by Regnault; is a colorless liquid, with an odor quite like that of chloroform, from which it differs in specific gravity; possesses one eq. less of chlorine and boils at a lower temperature, for which reason its vapor is more rapidly eliminated from the blood, so that recovery from anæsthesia produced by its i ha-

lation is much more rapid. Also, anæsthesia can be produced by it with greater rapidity and can be maintained with as great persistency, and requires a far less quantity—no inconsiderable element as regards safety. There are no disagreeable “head symptoms” on awakening, and, as I have before remarked, vomiting is exceedingly rare—no inconsiderable advantage, especially in abdominal and uterine operations.

No hurry in operating was ever occasioned by it. The most tedious laparotomy I ever did was a 45-pound multilocular ovarian tumor. The patient had, most unfortunately, been subjected to severalappings, and I had to deal with adhesions *everywhere*. Anæsthesia was maintained in the most satisfactory manner during the *two hours and twenty minutes* that the operation lasted; recovery to consciousness was prompt, and followed by no nausea. As has been intimated before, a small amount, only, is required. I have often produced full



Fig. 1. Junker's Inhaler.

anæsthesia with one-half to one drachm, and it was a rare operation where I used over six drachms; and, while less time was often taken than with chloroform, yet the same care and watchfulness was exercised—the object being to induce safe, rather than rapid, effect.

In every instance, I have used bichloride of methylene from a Junker's Inhaler, made by Messrs. Krohne & Seseman, of No. 8 Duke St., London.

The accompanying cut gives a good idea of the apparatus.

When using the inhaler, the graduated bottle has put into

it from four to six drachms of methylene, according to the expected duration of the operation ; it is then suspended from the button-hole of the coat of the administrator. By pressure of the bellows, 4.332 cubic inches of fresh air are forced through the long tube into the fluid, and escape (impregnated with the vapor) through the short tube into the face-piece, from whence the vapor is inhaled—the quantity of supply being regulated by the quantity of pressure of the bellows and the amount of fluid in the bottle. Or, in other words, the less fluid there is in the bottle, the greater is the dilution with air from a given amount of pressure of the bellows.

It will be observed that the patient is not made to breathe air which has been already expired. By correctly timing the compression of the bellows with each inspiration the patient gets fresh air impregnated with fresh vapor, and at each expiration that which was taken into the lungs escapes through the valve and at the sides of the facepiece. After full anæsthesia is induced it is easily maintained by only now and then compressing the bellows when signs of returning consciousness are noticed.

With my experience in the use of bichloride of methylene administered in a Junker's inhaler, I venture to sum up its advantages as follows :

1. Nearest approach to safety of any method yet devised.
 2. By giving the anæsthetic vapor in small, known quantities at each inspiration, the minimum of risk is incurred.
 3. By allowing the free ingress and egress of air, the second or struggling stage is frequently avoided.
 4. Over rapid narcotism is almost impossible.
 5. Vomiting is almost always avoided.
 6. The administrator has complete control over the anæsthetic.
 7. At each inspiration, the patient is furnished with fresh air and fresh vapor.
 8. Rapid return of consciousness, when the anæsthetic is discontinued.
 9. Economy in the use of the anæsthetic.
- 614 Olive Street.

GENOCATACHRESIA. (GENOS—Sex, and KATACHRESIS—Abuse).
ITS FORMS, CAUSES, RESULTS AND TREATMENT. BY CHAS.
EVERETT WARREN, A. B., M. D., Boston, Mass.

THE CONSEQUENCES.—In considering the results we must look to the rationale of the prime cause. Montaigne gives a true, although cynical, definition of love as “a thirst for its pleasures.” Mantegazza says, this is a diabolical definition yet an unfortunately true one, and adds “the hygiene of love demands that it drink at the fountain when thirsty.” The evil lies in the wilful crucification, so to speak, of this normal function. There is a normal, true and spontaneous desire for sexual gratification in every healthy man and woman. This physiological desire is inherent, insistent and irresistible in every human being, and being naturally satisfied does not weaken or depress the system but opens, as it were, a wider and grander horizon of life.

There is a self-satisfied feeling that a good action, as it were, has been well done and the agent thanks nature, if no higher god, that in this vale of tears she has given this compensatory joy and consolation fraught, as it may be with sorrow. I hold that in the grand plan of nature, whether planned by God or the result of evolution the woman is the complement of man in every respect both physical and psychical. The very existence of an organ indicates a function to be performed. The heart indicates circulation, the lungs respiration, the stomach digestion, the intestines assimilation; without these life would cease. In the lower phases of life these are to a certain extent automatic, without volition, and added to these is the act of reproduction, equally without volition. If we see this trend of nature, we must by induction concede that sexual intercourse is a necessity of life and grant that its normal satisfaction in the higher animals is not only natural but essential to life. An undue suppression or negation is just as bad as an undue gratification. Nature herself will let off the safety valve if the high pressure is not removed or otherwise relieved. This physiological and normal desire being ever present it is not strange that some artificial means of gratification and relief should be devised, the natural means being denied by circumstantial inopportunities or impossibilities. Moderately indulged in we can not expect any more serious results to

mind or body than is due to moderate sexual intercourse excess in either case being detrimental.

On the other hand the dismal pictures so skillfully but wrongly painted by Acton, Lallemand, Tissot and others, and so successfully perpetuated and elaborated in the alarming advertisements, letters and pamphlets of some specialists, regular as well as irregular, in reality often seriously affect the victim more than the habit, by attracting his attention to secretions and sensations which are often nothing more than manifestations and signs of health rather than disease, or the natural result of fatigue of mind or body.

Lead by conscientious but fallacious ideas on the one hand, or by a love of gain on the other, this doctor, true or false, as he may be, condemns his victim to a hell of suffering and remorse. Béveillé-Parize voices this alarming and pessimistic view by saying: "In my opinion neither the plague, or war, or famine, or a multitude of similar evils have resulted more disastrously to humanity than the fatal habit of masturbation; it is the destroying element of society; so much the more active as it is continually increasing itself and decreasing population."

In marked contrast to this dismal outlook, Felix Roubaud says: "Authors who take self-abuse as a subject for discussion or as a specialty in practice, delight doubtless with laudable intention, but often overreaching the mark delight, I say, in darkening to the deepest shade, without stint or measure, the colors in which they paint the vice and its results."

Paget in a temperate article in his finely written and instructive "Clinical lectures and Essays," Bumstead and Taylor and other writers, more optimistic in their views than those who see only thorns on rose bushes, take rational, quiet and reassuring views of this vice and its results. Dr. Bell, who wrote upon this subject, said to a young man who thanked him for his work, "I am sorry that I ever wrote it! Because I believe that what I have said of the possible evils of masturbation and nocturnal emissions was overdrawn and has done more harm by the fears it has excited than a continuance of the practice itself would have done." He prescribed no medicine in the case cited but simply advised hygienic precautions adding, "You must expect nocturnal emissions to occur, from time to time, but they will grow less frequent as you grow older, and if you ever get married they will cease."

The vice varies in its results with the ways and means. We may divide it into two forms, a physical habit and a psychical perversion. In the child the former element predominates while in the adult the nervous element is greater thus making it more serious in its finality. The comparative frequency of the act must necessarily determine the severity of the result. When indulged in as a relief of tension and in moderation the act can not of itself be injurious. We might on the other hand go so far as to say that the act might be of benefit in certain cases. When, however, the habit becomes an intemperate one and the act is repeatedly performed, whenever opportunity presents, then the pernicious results so graphically described by some specialists may and doubtless sometimes do occur, but it is a question whether the state of erotomania so common in these cases is not primarily the cause of the habit rather than the result. Nay, more, the solitary vice or dual satisfaction by strange and devious ways must of necessity be less harmful than conjugal excess, for as the dual act is more complete in its means and ends so must the reaction both physical and psychical be the greater.

In enumerating results of sexual abuse I would therefore include all abuse or excess as causes, not limiting them to solitary vices but broadly including all excess of single or dual form, whether of illegal prostitution or legalized but prostituted marriage.

In the male sex any abuse of the sexual organs may determine one or more of the following physical lesions, namely: Paraphimosis, balanitis, urethritis, orchitis, hæmaturia, enlarged prostate, cystitis, incontinence of urine, varicocele, and finally involuntary seminal loss or spermatorrhœa. I would qualify the list by calling attention to the fact that any one of these lesions may occur from other causes, even though the habit exist and that conversely it may induce the habit. The last named lesion is especially blind and many cases are based upon a false diagnosis and a confusion with prostaticorrhœa. The introduction of foreign substances within the urethra may cause laceration and consequent stricture or by breaking off leave a nucleus for concretion or stone within the bladder.

In girls there is usually a ruptured hymen ascribed as a rule to one of a thousand possible causes. Whether this is the case or not there is an irritation of the labia and clitoris

manifesting itself by a reddening of the tissues indicative of the act. Vulvitis, dysuria, leucorrhœa are common consequences and most commonly of all we find a non-virginal laxity of the vagina and uterine ligaments leading to displacements and lesions of obscure origin otherwise inexplicable.

In addition to the local lesions we find in both sexes general perversions of function more or less directly due to sexual abuse. Among these we enumerate: Dyspepsia, gastralgia, neuralgia, anemia, neurasthenia, chorea, hysteria, hypochondriasis, epilepsy, mental alienation, congestion of the brain, of the cord, or of the lungs, locomotor ataxia, phthisis and consumption. But these should not for a moment be considered as idiopathic lesions of self-abuse. They are deuteropathic primarily and essentially due to a predisposition, through heredity or diathesis, and only secondarily due to excessive sexual abuse which is singularly potent in forcing these tendencies. We might by metonymy liken the habit to the fertile soil and the hot-bed wherein seeds may rapidly germinate which under natural conditions would perhaps lie dormant forever.

On the other hand there are many who practice self-abuse without detriment to themselves. The conscience alone is the arbitrator in these cases for we cannot rationally expect any physical harm. However culpable it may be in moral law there is no penalty to be expected or incurred in physical law.

These cases are the result of circumstance rather than wilful intent. They have not practiced the habit before puberty and have been denied natural satisfaction by inability to marry, or have been widowed by death or temporarily been deprived of the copartner in life, or have been afraid of getting disease or a child, and so on to the end of the chapter.

The habit has been an accessory means to and not the end of life. This distinction of means and end covers I think the whole question. Only when the mind partakes of the habit and looks for gratification as the end of life, does the pernicious influence develop. The erotomaniac is always searching for and can never see anything but the sensual and sexual in life, act or fiction. Sexual abuse in such a one is an end to the means or a means to the end.

(To be continued.)

Correspondence.

CORRECTION IN REGARD TO DR. G. F. HULBERT'S CASES
OF HYSTERECTOMY.

EDITORS ST. LOUIS MEDICAL AND SURGICAL JOURNAL :

DEAR DOCTORS:—Will you please correct the mistake in my table of operators on page 345, December number of the JOURNAL, in regard to Dr. Hulbert's operations. It should have been *two operations without primary death* instead of *two hysterectomies, with two deaths*. It must have been a mistake of the typesetter, as I was very careful. I do sadly regret it for several reasons. Very respectfully yours,

Winfield Ark., Dec. 11, 1891.

CHEVES BEVILL.

The Second Annual Session of the Association of Military Surgeons of the National Guard of the United States will be held at St. Louis, April 19, 20 and 21, 1892. An interesting programme of addresses by prominent surgeons of the National Guard and the United States Army has been arranged, and a goodly number of scientific papers on Military and Accidental Surgery will be read and discussed, and all matters pertaining to the health, usefulness and welfare of the civilian soldiers will receive attention.

The afternoon of one day will be set apart for an object lesson from the "Manual of Drill" by Hospital Corps of the United States Army, detailed for this purpose. This will be a very important as well as instructive feature of this session. The evenings will be given up to entertainments, receptions and banquets, which the medical profession and generous citizens of St. Louis have planned for their distinguished guests. The Committee of Arrangements have received the assurance that transportation will be satisfactorily reduced on all railroads and steam-boats, to and from this meeting. The several hotels have promised a low and uniform rate, which will be announced at an early date. It is anticipated that not less than five hundred surgeons and assistant surgeons of the National Guard of the United States will be in attendance, to all of whom the Committee of Arrangements extend a most cordial welcome.

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THE JOURNAL FOR 1892.

A retrospect of the past few years has shown the radical changes which have occurred in medicine in all of its branches. But in no respect has this been shown more markedly than in medical literature. While the text-book and the monograph are still treasured both on account of early associations and on account of the trust which is placed in the author, the periodical literature of medicine as represented in the medical journal has grown apace. The growth in the number of medical journals of late years has not only been a steady one but it seems to be rapidly increasing and threatens soon to be out of proportions to the demands which may exist for it.

This rapid growth is certainly not a healthy one and the fruit which has been brought to us is not of the best, as a general thing. The JOURNAL has always endeavored to keep abreast of the times and, despite its age, does not show any signs of decrepitude. But the bantlings which are periodically shown to us evince signs of weakness from their birth and evince the fact that those who have vaulting ambitions to become medical editors are but dimly acquainted with the labor, care, and worry which they are so ready to assume and which they are so often incapable of bearing.

THE JOURNAL will endeavor to keep abreast of the times as it has always done and present to its readers that which care-

ful culling and painstaking selection shows to be the best. The monthly from the very fact that it appears at comparatively long intervals is supposed to present that to its readers which can be relied upon and it is this very quality that we wish to preserve.

We desire furthermore to say that the JOURNAL, while never willing to indulge in personal journalism, will always be opposed to sham, deceit, and fraud. That it will use its every effort to reduce these malignant growths and it will be its aim at all times to further the interests of the profession by all the honorable means at its command. More it cannot do.

So far as its general contents are concerned a combination of the *utile cum dulci* will ever be its guide. That which is calculated to prove of real value and service to its readers is that which it proposes to present to them and the worthless will be eliminated and discarded as so much medical rubbish undeserving of even a mention.

It is not often that we make a declaration of principles; but, in view of the fact that some are inclined to doubt what the future course of a medical journal is to be (new resolutions being made with the New Year) we have thought it best, under the circumstances to reiterate the statement of our position taken so many years ago.

Hoping that all in the profession may have enjoyed a most Merry Christmas and that the New Year may prove happy and bountiful we launch out once more with increased vigor and vim.

EDITORIAL NOTES.

THE LIMITATIONS OF MEDICAL LEGISLATION are such that the *Lancet-Clinic* is brought to state that all present signs indicate that the future emancipation of the medical profession from charlatans and quacks will be largely due to the progress of higher education—the requirements for admission to and graduation from our medical schools must be greater and the enforcement of these must be rigid. Already we see the signs which betoken improvement, but we must not be misled by these apparent regulations, for all of us must admit that each year there are graduated men who are in nowise fitted for the practice of medicine. Nature did not endow them with a fair share of cerebral cortex, and their lives have not

been such as would conduce to the highest development of even their limited talent. Perhaps the blame for allowing them to enter the ranks of medical practitioners should be laid at the door of their *alma mater*, and perhaps sharp competition has forced the college to grant them diplomas. Many a graduate of our medical colleges is not prepared to undertake so serious a task as the responsibility involved in the treatment of a serious case of illness. No one, however, can deny that the college discipline and good associations have made them more competent than they would have been without such experience. The necessity for granting diplomas to incompetent men may be regarded as due largely to the peculiar features which have pertained to our country. The comparative newness, the dearth of physicians, and the absence of institutions for higher education have all combined to bring about the result. Medicine is no different in this respect from other professions.

THE SURGERY OF THE LIVER, says the *College and Clinical Record*, divides the honors of the day, as to boldness and skill of operative procedures, with that of the brain and abdomen, to which we referred in our previous issue. Like the surgery of those regions, it is progressive and gains, at each judicious advance, a greater distance from the methods of our ancestors, which were cautious and tentative, and apparently based upon a slight degree of timidity as to results. The gall-bladder and its duct share with the liver and its excretory canal the direct and pointed attention of modern surgeons, and nomenclature has been enriched by several new terms expressive of their invasion of these organs. Discussions have been noted, for instance, in recent medical literature as to the desirability of performing cholecystenterostomy rather than cholecystectomy. Lithotomy for calculi in the gall-bladder, more correctly, perhaps, lithotripsy, is occasionally performed. The liver is explored nowadays with aspirators or resected, and tumors are removed from its surface or structure frequently, with success, or with a sufficient percentage of fortunate results to warrant operative interference in similar cases. Certainly these advanced steps of operative surgery are all worth recording, even in an age when the medical or surgical mind is prepared for anything remarkable that may flash, meteor-like, upon it.

THE TUBERCLE BACILLUS is thus disposed of by the *Vis Medicatrix*: Now, as to the tubercle bacillus, there is no question that the inoculation with or ingestion of the sputa of tuberculous human beings, is frequently followed by a local or general process of *anatomically* tubercular degeneration of the tissues of the animals experimented upon, but we would respectfully submit that this by no means proves that tuberculosis or "consumption," as such, has been transmitted. Indeed there are certain well-known facts which appear to us to militate decidedly against any such conclusion. One is, that animals kept in captivity are peculiarly liable to this disease, apart from all question of infection; indeed it is the commonest "natural" cause of death among them. Another, that injections with *any sort* of putrefying material, or even with inorganic substances that are chemically irritating, are also capable of setting up this process, and last, but not least, the disastrous collapse of the magnificent, almost millennial, creature of Koch's great intellect.

The only flaw in its wondrous structure was the fact, that while tuberculin would unquestionably check and "cure" the "transmitted" disease in guinea-pigs and rabbits, it was unable to so affect the supposed original process in the human subject. The lymph was all that was claimed for it in vigor and efficiency, but the diseases were in some way different, *hinc illæ lachrymæ*.

SUBSTITUTION is dwelt upon in no uncertain tones by the *Southern Clinic* as witness the following: We do not know that we can call the attention of our readers to a more important subject than the one of substitution, now practiced so extensively by druggists here and there, who seem to have an idea that there is no harm in giving a customer one thing when his prescription calls for another. To put it mildly, a druggist who will substitute one article or one maker's goods for a different one ordered by the physician is worse than a thief of the average calibre, for he not only robs the manufacturer, but jeopardizes the doctor's reputation—and still worse, he deprives the unsuspecting patient of a possible chance for his life. These vampires become accessories to murder, if not actual murderers. Only a few weeks ago we were in the laboratory of a large wholesale manufacturing house in Philadelphia where a package of twenty boxes of pills were re-

ceived from a party who had purchased them in person on written prescriptions from as many drug stores in a neighboring city. Each prescription called for the same number of two grain sugar-coated quinine pills, especially calling for the make of this house in whose laboratory we then were. Upon opening these packages all duly labeled, numbered and dated by the respective retailers, *thirteen* out of the twenty were substitutes for the genuine article. Some of these pills were not even two grain pills of any make—but one grain. So that the poor patient neither got what he wanted in quality or quantity. A druggist who will do this kind of thing will do anything dishonest, and our reputations or the lives of our patients are not safe in their hands. It behooves us of the profession to stand firmly by the faithful and true men of the pharmaceutical calling who are above such practices, and to find out and break up such substitution.

THE CODE OF ETHICS is discussed by the *Pittsburgh Medical Review* which says that the men who boom their practice by self-laudatory advertisements confess that they cannot trust their patients to recommend them to others—the most effective and cheapest kind of advertising. Do the gentlemen of the daily press search their own columns for the name and qualifications of a medical adviser to whom they would entrust a member of their own household, suffering with pneumonia or diphtheria? The code in general is so clearly in accord with the sense of the becoming, that its principles would still rule the profession in the main if it were never read by any one. The public are more interested in having the profession adhere to the regulations of the code than the medical men themselves. With us it is mainly a matter of self-respect; the interest of the public is as great as its interest in the progress and diffusion of medical knowledge. The doctors of our day obtain no greater fees in proportion to the incomes of their patients than in the days when medicine was at a standstill. The spirit of the regulations of the code (or codes) has had much to do with this advance. The experience of a single practitioner is rarely if ever sufficient to put the merits of a plan of treatment beyond question. If the discoverer of a new method should keep it secret he would not only deprive the patients whom he would be unable to treat of its benefits, but would lack the confirmation of the experience of others.

Heretofore when the secret discoveries have finally leaked out they have proved to be worthless, or at least of far less value than the claims first made for them.

THE DEVELOPMENT OF THE SECTIONS of the American Medical Association has occupied some of the attention of Dr. Leartus Connor who, at the last meeting of the Association formulated his views as follows: 1°. The sections are the Association, and should conduct its affairs. 2°. The simplest method of attaining this end is to have each section appoint an executive committee of three to look after the interests of each individual section, and to unite with a similar committee from the other sections to form a section council. 3°. This council should have charge of all affairs of the Association that bear upon the development of the sections. 4°. The members of the several section executive committees should be appointed for three years, and be composed of ex-chairmen of the section, the retiring chairman of each year filling the vacant place of the retiring member. The details of the plan can readily be made to fit into the existing state of affairs, when once our first proposition is admitted.

The section in ophthalmology ratified this by electing three members and now the originator of this method is desirous of having every other section do the same at the next meeting. There is no doubt that such a section council could wield a large influence for the bettering of the sections some of which sadly need some life infused in them.

A Bad Case.—One of our exchanges says: The following is a copy *verbatim et spellatim*, of a note received by the editor, a short time ago: "Doc i have the arsiples in my face plese send me some thing for it i am using iodine,i want some thing for my blood and cidenys—i am sick at my stomick all the time—plese send the medson with the boy."

At the Recent Meeting of the American Surgical Association a committee was appointed to confer with the friends and admirers of Professor S. D. Gross, and with the profession at large, for the initiation of a movement on the part of the Association having for its object the erection of a monument to Dr. Gross in the city of Washington.

Microscopy.

The Development of Spongilla.—It will be remembered that a while back an ambitious Kansas correspondent undertook to prove through the columns of the *Weekly Medical Review* that certain forms of eczema were caused by spongilla, or fresh water sponges, and actually claimed to have "cultivated" the dry sponge spicules on dogs, etc., and to have reproduced eczema in man from these cultivations. He named the disease so produced "eczema spongioides" or some such name. It was a fake, however, and the only wonder is how any medical journal could have been taken in by it. Very recently Dr. Otto Maas has been making a serious study of the development of spongilla, and has contributed the following to the *Zeitschrift für Wissenschaftliche Zoologie* on the subject: Commencing with the egg, Dr. Maas found it to segmentate as other eggs, the first two, four, eight and sixteen segmentations to be precisely similar, giving similar reactions to the staining agents, etc. Then there results a solid morula, serial sections of which demonstrate that at one pole the cells sink inward while the peripheral cells grow over and thus enclose a cavity at one end of the egg. The writer would not undertake to say whether this was the result of the process of cell growth around one pole of the egg or whether it was a process between epibolic and embolic gastrulation. The outer cells rapidly begin to differentiate into tissues, only the inner one retaining yolk spicules. The extreme outer layer becomes columnar ciliated ectoderm, while the cells lining the enclosed cavity become flattened at points and push themselves out into passages ending in ciliated chambers, which later become the inhalant passages.

The remaining yolk containing cells, the so-called mesoderm cells, now begin to push out needles, each needle being the product of one cell, and these by their growth push the ectoderm before them. All the foregoing phenomena occur while the egg is yet in the parent sponge tissue. Now, however, the larva becomes free and swims about, the cavity being always directed forwards. The laval life lasts about twelve hours

sometimes longer, but never so long as twenty-four. Then comes fixation. This is best watched with the microscope in a horizontal position. The larva fixes itself at the end containing the gastral cavity (the pole directed forward in swimming). The cavity diminishes and the young sponge flattens to a mere crust; the lofty cylindrical ectodermal cells become shorter and more cubical, then flatten until their longest diameter is coincident with the surface, and the cilia, one to each cell, at first close together, flatten and lie far apart. This entire process lasts from one-half to three-quarters of an hour. The peripheral ectoderm cells now begin to spread themselves over the support to which the sponge has affixed itself, doing so by the well-known amœboid-like ectoderm cell movement. The ectoderm is never thrown off (as supposed by Götte) except by rough treatment. When the larva becomes firmly fixed the ciliated chambers come toward the surface, fuse with the ectoderm and from the inhalant orifices, the exhalant orifice originating through secondary connection of the inner cavity with the external world.

In the examination of these processes the author made use of what he calls a "cover-glass aquarium," a little aquarium containing perhaps a hundred cubic centimeters, the sides of which consisted of sheets of cover-glass about ten cm. (i.e. four inches) square. The free larvæ attached themselves to cover-glass were allowed to float on top of the water, and were removed from thence to a wet chamber apparatus on the stage of the microscope. Permanent preparations of the larvæ may be made by staining with silver nitrate. As a preservative for bunches of the sponges the author used alcohol, gradually increased in strength until absolute alcohol was finally reached.

For the larvæ the author used sublimate and hyperosmic acid, though Flemming's chrom-osmium-acetic solution was found most excellent. For coloring large bunches of sponges the author found borax-carmin and hæmatoxylin highly satisfactory. For subsequent differentiation of yolk material (in sections) the complementary *bleu de Lyon* and malachite green were used.

How to Prepare Embryos of Earth-Worms or Similar Embryos.—R. S. Bergh, in the *Zeitschrift fuer Wissenschaftliche Zoologie*, gives the following method of demonstration of the teloblasts of the germ bands in embryos of *lumbricus* and

similar helminths. The embryos, from five to eight millimetres in length are placed in fresh filtered lemon juice for five minutes. Thence they are removed into a one per cent. solution of gold chloride where they remain for twenty minutes, and thence, for reduction, into a twenty per cent. aqueous solution of formic acid. This latter should be done in full daylight, but not in direct sunlight. At the expiration of from one to two hours, according to circumstances, the embryos will be found reddened and sufficiently soft for future manipulations. The objects are now removed to a glass slip, where the external dorsal wall is removed, and the object turned so that the ventral wall is turned upwards. The addition of a drop of water and a cover-glass, enables the observer to see (under the microscope, of course), the cell rows and teloblasts with great distinctness.

When a closer examination is desired the method is quite different. The embryos are placed first in Flemming's chromosmium-acetic solution, where they are left for a few minutes, and thence removed into a solution of platinum chloride (1:300) and allowed to remain from twice to three times as long as they remained in Flemming's solution. This completes the preparation. The embryos are washed and transferred to glycerin, from which they are removed to the slide and examined in glycerine. If sections are to be made the preparations are stained in aqueous hæmatoxylin, hardened in alcohol and prepared in the usual way. For the demonstration of the median ventral nerve-cell plexus, the plan first mentioned is followed, the reduction, however, being affected by very dilute acetic (instead of formic) acid in full daylight. At the end of one to two days, according to the season, the objects are violet colored. They may now be examined in glycerin or they may be hardened in alcohol and sectioned. In very young embryos the epidermis and neural and muscle plates appear clear, the nerve-cells alone being stained a dark violet.

F. L. J.

Plain Truth.—Says the *Sanitary Plumber*: "There is not a city of any size in the country where the water supply is of a quality fit to drink, and to this source is due in a large measure the unhealthy condition and much of the sickness of the people who are obliged to use it."

Dermatology and Genito-Urinary Diseases.

Tumenol in Skin Diseases.—Neisser (*Deutsche Med. Woch.*), after prolonged investigation, recommends tumenol as a valuable application for some skin diseases. This substance which was discovered by Spiegel, is allied to ichthyol, and like it, is obtained from mineral oils, the name "tumenol" being abbreviated from bitumen and oleum, the former being the source of mineral oils. Occurring amongst the unsaturated hydrocarbons contained in the mineral oils, the impure mother substance is treated with sulphuric acid, when a process of sulphonation under oxidation takes place, which results in the production of tumenol—a compound containing two ingredients, tumenol sulphon, and tumenol sulphonic acid. In order to separate these two the tumenol is converted into salts by the addition of a solution of soda, and then extracted with ether as long as the latter continues to be colored. The ethereal solution then contains the sulphon, the aqueous solution of the sodium salt of the sulphonic acid. The color of the concentrated preparations is black, more dilute mixtures being grey. The solubility in water is considerable, and the odor not offensive. Hitherto Neisser has only experimented with the aqueous solution of the tumenol sulphonic acid, the salts not having as yet been sufficiently tested. The effect of tumenol as a healing application is probably due to its "reducing" action, and also to the readiness with which it can be absorbed, the preparations in use being two tinctures—equal parts of ætheris sulph., sp. vini. rectif., and (a) water or (b) glycerine—a powder, an ointment, and a plaster. Tumenol preparations appear most suitable in the treatment of "weeping," moderately severe eczema, of burns of the first and second degrees, and of many forms of itching, whether due to eczema or prurigo. As a surgical dressing Neisser recommends them for both superficial and deep ulceration, for ecthyma due to pediculi, for rhagades, and for scabies. Ulcers of the leg are often rapidly healed. On the other hand, tumenol has no antiparasitic action, nor does it affect the patient constitutionally.

New Ointment Base.—Helbing in the *Zeitschr. d. Allg. Oesterr. Apot. Verein*, recommends the following as a base for mercurial ointment, and other unguents containing metallic mercury :

Wool-fat (suint) free from water.....	65 parts.
Liquid paraffin.....	30 "
Ceresin.....	5 "
Water.....	30 "

Mix *secundem artem*.

For Intertrigo.—The *Med. Times and Register* recommends the following to cure severe chafing or intertrigo :

℞ Camphoræ.....	3ij
Acid carbolic.....	gtt. xv
Cretæ precip. (English).....	3ij
Zinc oxid. pulv.....	3ij
Ol. neroli.....	gtt. v
Ol. rosæ.....	gtt. ij

M.

Rub the camphor to a fine powder in a mortar, using alcohol to reduce it, and mix the other components thoroughly ; sift through bolting cloth of one hundred meshes to the inch.

Ointment for Erysipelas.—The following is given in *Jour. des Mal. Cut. et Syph.*:

℞ Ichthyol.....	aa 3ss
Lanolin.....	aa 3ss

M.

This should be applied to the affected parts and covered with salicylated cotton.

I have found the following very useful as an external application :

℞ Iodoformi.....	3j
Collodii.....	3j

M.

Sig: Apply with a brush twice daily.

Bromidrosis.—This troublesome affection seems to be most obstinate to various forms of treatment and, as in many other affections of a similar trend, the result is a large number of formulæ for the treatment. In bromidrosis of the feet, a writer in the *Therapeutische Monatshefte* recommends the following :

℞ Acid. salicylic.....	
Aluminis.....	
Pulv. oryzæ.....	aa 3ss

M.

Sig: To be sprinkled in the shoes and stockings every morning.

This will act better if the feet are first washed with a three per cent. solution of chromic acid.

Moniliform Hair.—At a recent meeting of the Medical Society of London, Dr. Phineas S. Abraham, showed a child (*British Medical Journal*) two and one-half years of age, who had been born and had almost remained bald. There was present on the scalp a little wooly growth of very little hairs, each presenting about twenty nodular enlargements; fracture occurred between the nodules. No application had proven successful in stimulating the growth of the hairs, and he suspected the presence of a bacillus. Dr. Colcott Fox stated that he had observed a similar condition occurring in several members of one family and he suspected a developmental defect. Some time ago the opinion was advanced that this trouble as well as trichorrexia and ringed hair was the result of nervous trouble.

Scrofulous Leprosy.—Dr. Adolf Lutz, in a letter from Honolulu to the *Monatshefte fuer Praktische Dermatologie*, states that this scrofulous leprosy consists of single and disseminated macules occurring in one region, together with areas of anæsthesia and contractures. He has seen at least a dozen children who, besides a partial contraction of both little fingers had no probable symptom. However, such cases are always suspicious more especially when there is a diminution of sensibility and are like slumbering volcanoes which may burst into an eruption at any moment. It is at such a period that an eruption will manifest itself and the certainty of the disease be fully established. However, these cases remain stationary and can not be placed in the category of the diseases which are exanthematous. In the Sandwich Islands they are looked upon as “suspicious” but are not isolated.

Keratosis of the Palms and Soles due to Arsenic.—It is only of late years that much attention has been paid to the cutaneous troubles brought on by medicines. When we consider the great proneness of practitioners to administer arsenic in cutaneous affections, we are surprised that there is no greater number of cases of apparently atypical eruptions reported as a direct result of the toxic effects of this drug. Not long since Dr. L. D. Bulkley reported a personal experience in

the *Journal of Cutaneous and Genito-Urinary Diseases* in which he suffered from a vesicular affection of the upper extremities, the cause being arsenic. In the *British Journal of Dermatology*, Dr. J. J. Pringle reports a case of keratosis of the palms and soles which he considers directly attributable to this cause and, in a private letter to him, Dr. E. Besnier states he is convinced that he has observed a case of primary keratosis brought on by the long continued administration of arsenic. I have observed a few cases of herpes zoster due to the same cause. I should add that the cases were not typical except in so far as the objective symptoms were concerned for there was no neuralgia nor any concomitant sign of a subjective nature except some little pain and itching.

Confluent Warts of Scrotum.—Our readers may remember that, in 1889, I reproduced the account of a case of confluent warts on the legs, by Dr. Gémy. The same author reports a case in the *Annales de Dermatologie et de Syphiligraphie* in which the patient was a native Algerian. For five years the patient had observed small tumors gradually appear upon his scrotum. Three weeks previous to being seen he complained that he was troubled with an intense pruritus of the parts. This was so great that he could not sleep. Nervous excitement was very apparent in the patient. On examination there was found at the peno-scrotal junction a papule as large as a gold dollar. This was the first one which appeared. Then then there existed in spoke-like fashion five lines of verrucæ each one consisting of from ten to twelve lesions, those nearest to the first or *mother* being confluent, the others somewhat separated. The latter were also more hard in their consistence. On the lower surface of the penis these warts occurred in parallel lines on each side of the raphé and extended up about one-half the length of the organ. The diagnosis was certain with one exception—the itching. A close examination showed the presence of pediculi pubis and this cleared up the obscurity. The pediculi were killed and a salicylic preparation ordered for the warts. The interesting point in connection with the case is the rapid multiplication of the warts which occurred after the itching produced by the pediculi induced the patient to scratch the parts energetically.

O-D.

Excerpts from Russian and Polish Literature.

Transmission of Syphilis through Shaving.—Dr. Dmitry P. Nikolsky, of St. Petersburg, relates (*Vratch*, No. 44, 1891, p. 987) another instance of the kind, referring to a generally healthy, powerfully-made married turner, aged twenty-eight, who sought his advice on account of an indolent sore seated on the right cheek, near the angle of the lower jaw. The lesion, measuring one-half centim. by three millim., was covered with a dirtyish-brown crust, after removal of which there presented itself an oval ulcer with clean-cut, elevated, hard edges and a funnel-shaped floor. The latter was coated with a tallow-like film. The right-sided submaxillary lymphatic glands were slightly enlarged. The patient's genitals proved to be sound. According to his statements, the ulcer had developed on the site of a pimple (acne) which had been sliced off during shaving at a barber's shop, about a fortnight previously. A syphilitic chancre was diagnosed, and a corrosive sublimate lotion ordered. Shortly afterwards there supervened angina, indolent polyadenitis, roseola, moist papules on the scrotum and around the anus, etc. Under the influence of a specific treatment (by mercurial frictions and the internal use of corrosive sublimate) all the syphilitic manifestations vanished. A relapse occurred about two or three months later, which was treated in the same manner. In about two months after the patient's visit to the barber's shop, his wife consulted Dr. Anna I. Nikolskaia (the author's spouse) on account of a recent Hunterian chancre on the inner surface of a major labium, the disease subsequently running its course as usual. Like Dr. I. S. Idelson (*vide* the ST. LOUIS MEDICAL AND SURGICAL JOURNAL, June, 1891, p. 365), the author insists on an imperative necessity of a thorough sanitary control over all barbers' shops.

Dr. Nikolsky discusses further the question on *syphilis insontium* in general, and draws attention to the important fact that, as far as the Russian country population is concerned, the syphilitic infection spreads mostly in a non-sexual way. Thus, Dr. Belousoff, of Odoiev (*Vestnik Sudebnoi Meditsiny*, etc., 1885, Vol. IV), analyzing 334 successive syphilitic cases

from his practice, emphasizes that 77 per cent. of the patients contracted the disease through cohabitation. The country (*zemsky*) practitioners of the Riazan Government (*Transactions of the IId General Meeting of Russian Medical Men at Moscow*, 1887, p. 20) observed the same mode of infection in 74 per cent. of cases, their total series embracing 2765 cases of syphilis. Dr. A. Kh. Sabinin, of Voronej (*ibidem*), says that the percentage for his *Gubernia* (Government) amounts to 76.7. According to Dr. Popoff (*Proceedings of the Kursk Medical Society*), the percentage for the Kursk Government averaged 85, and for the Vladimir Government 91.3. Of 3012 syphilitic patients, treated by Dr. Glazünovsky, of Zemlansk (*Vratchebnyia Vedomosti*, 1882, No. 507), 1361 contracted the infection in a non-sexual way. According to Dr. I. A. Dmitrieff (*vide* his monograph on "*Infectious Diseases in the St. Petersburg Gubernia in 1887; 1888 and 1889*"), the percentage in various *uezds* (districts) of the St. Petersburg Government oscillates between 28.9 and 59.6. Dr. Romansky, of Nijni-Novgorod (*Transactions of the Third General Meeting of Zemsky Medical Men of Nijni-Novgorod Gubernia*, 1870, p. 62) similarly points out that in his Government the peasant population is syphilized chiefly through the use of common utensils, towels, etc.

Purifying Water by Unslaked Lime.—As is familiar to everybody, the water of wells, springs, brooks, etc., is often infested by crenothrix, cladothrix, and allied fungi, which form greenish-brown flocks floating over the surface or gathering on the bottom, and make such water quite unfit for drinking purposes. Occasionally the fungi may even totally obstruct the waterpipes. According to some experiments, recently made by Professor Szpilman, of Lvov, Austrian Poland (*Zdrowie*, No. 71, 1891, p. 343), the fungi can be thoroughly destroyed in twenty-four hours by adding from one-half to two kilogrammes of unslaked lime to each one hundred litres of infested water. Two town fountains at Lvov have been lately purified after this simple and inexpensive method.

Atrichia Adnata.—Dr. Fr. I. Schultz, of Riga, records (*Proceedings of the Riga Society of German Medical Practitioners*, 1891, p. 709) a highly interesting and probably unique case of congenital atrichia. The case refers to a generally

quite healthy and strong man, aged thirty-five, in whom the most careful examination failed to detect any traces of hair growth in any region of his body, except the corners of the mouth, around which there were scattered some ten thin little hairs, measuring from one to one and a-half centimetres in length. He had never had either any head or pubic hair, or eyebrows, or eyelashes, etc. Two sisters of his were similarly suffering from congenital atrichia, while his parents were developed normally in all regards. The only other abnormality about the patient consisted in the presence of a hernia. The author adds that he has been unable to find any other instance of the curious evolutionary defect in international literature.

Antipyrin in Hepatic Colics.—In the *Meditsinskiĭ Obozreniĭ*, No. 17. 1891, p. 463, Dr. Abram E. Pombrak, of Romanovo-Borisoglebsk, highly recommends the internal administration of antipyrin as an analgesic in cases of biliary colic. The author details an illustrative case of a stout lady of thirty-six with symptoms of cholelithiasis of six years' standing, the attacks occurring several times a year and lasting for many days. When called to the lady, on the second day of a severe attack, the writer found her suffering from agonizing pain accompanied by vomiting, collapse, and extreme tenderness about the right hypochondrium. For the first four days he tried the treatment by calomel (two grains hourly until liquid stools), morphia^m (under the skin and internally), amygdalin, leeches, etc. All the measures having utterly failed to afford any relief, on the fifth day antipyrin, in ten-grain doses, and natrosalicylate of caffeine, in one-grain doses, were given (in wafers) every two hours. After three doses the pain began to subside; after further five wafers it ceased altogether. On the seventh day the patient was up and about, feeling quite well.

Benzin in Pediculosis.—In the *Saratovsky Sanitarnyi Obzor*, No. 19, 1891, p. 636, Dr. Petr A. Nedzwiecki, of Serdobs^k, emphatically draws attention to the ordinary commercial benzin as an excellent means for rapidly and radically curing *pediculosis capitis vel pubis*. The parts infested should be freely bathed with the fluid for three or four minutes. The parasites and their ova ("nits") are killed instantaneously. Owing to an extreme volatility of benzin, its smell disappears very quickly. In a vast majority of cases, a single applica-

tion proves sufficient to free the patient from the abominable disease.

[Benzin was lately warmly recommended as a parasiticide and antiseptic by Dr. F. W. Langdon, *vide* the *Cincinnati Lancet-Clinic*, Feb. 7, 1891, and the *Philadelphia Medical and Surgical Reporter*, March 7, 1891, p. 285. Dr. N. K. Lavrentieff, of Tzaritzyn, uses the substance for sterilizing surgical instruments; see the *Supplement to the British Medical Journal*, August 8, 1891, p. 42.—REPORTER.]

Gastric Functions in Anæmia and Chlorosis.—Professor Gluzinski and Dr. Buzdygan, of Cracow, Austrian Poland (*Przegląd Lekarski*, 1891, VIII, 22), examined the gastric juice and the motor power of the stomach in fourteen men and women, of whom four were suffering from acute or chronic anæmia, and ten from chlorosis, the patients' ages varying from sixteen to thirty, and the duration of observations from one to five months. The principal outcome of the clinical research may be condensed somewhat as follows: 1°. In two cases of acute anæmia, depending upon profuse hemorrhage, both the chemical and mechanical action of the organ remained normal. 2°. In a case of chronic anæmia from hæmorrhoidal bleedings, the proportion of free hydrochloric acid in the gastric juice was subnormal, and the motor power of the stomach weakened. 3°. In a case of chronic anæmia of malarial origin, free hydrochloric acid was absent altogether. 4°. Of ten cases of chlorosis, in five the secretion of hydrochloric acid was normal, while in three it was increased, and in two entirely inhibited. In four of the ten patients, the motor power of the stomach was intact, while in the other six it was distinctly weakened. On examination of such patients in the morning (before breakfast), the stomach was found to contain remnants of the food taken during the preceding day.

Starting from the supposition that the deficiency in the motor power of the organ with its sequels might give rise to chlorotic phenomena, the authors commenced to treat their patients with daily washing out of the stomach in the morning. The results were very satisfactory, the treatment being followed by a gradual increase in the proportion of hæmoglobine and in the bodily weight, as well as by a steady general improvement.

Berne, Switzerland.

VALERIUS IDELSON, M. D.

Medical Progress.

THERAPEUTICS.

Neuralgia.—We find in the *Memphis Medical Monthly* that Dr. W. M. Hightower recommends the following:

℞ Ammonii bromidi.
Sodii salicylatis.....āā ʒ j
Tinct. hyocyami.....ʒ ij
Aquæ.....ad ʒ iv

M.

Sig. One teaspoonful every half hour until relief is obtained, or four doses have been taken.

Papoid in Diphtheria.—We find the following in *The Prescription*:

℞ Papoid.....gr. x
Aquæ.....ʒ ss
M. f. solution.

Kohts and Asch painted diphtheritic membranes with this solution every fifteen or twenty minutes with a soft brush. They found that the oftener the application was made the more rapidly membranes disappeared. Kohts treated several hundred cases by this method with the greatest success.

℞ Papoid.....ʒ ij
Beta-naphthol.....gr. iij
Acid hydrochl. dil.....gtt. xv
Aq. destil.....ad ʒ iv

M. ft. solution.

Sig. Use carefully and thoroughly by means of hand atomizer every half hour on throat and through nostrils on posterior nares and pharynx, if deposit extends to these localities. Papoid solutions should be made fresh daily.

Potassium Permanganate and Oxalic Acid as an Antiseptic.—At a meeting of the New York Obstetrical Society (*N. Y. Jour. of Gyn. and Obst.*) Dr. Malcolm McLean referred to the fact that at Johns-Hopkins Hospital, Baltimore, Dr. Welch and the surgical staff has found permanganate of potash, in combination with oxalic acid, superior to bichloride of mercury and other agents as an antiseptic. The scrapings from the nails, etc., taken after washing the hands in any one

of the various antiseptic solutions, developed under the culture process numerous germs, except in the case where a solution of permanganate of potash and oxalic acid has been employed, proving this agent to be superior to all other germicides. But a serious objection to the permanganate solution was that it stained the hands a yellowish brown, which it was difficult to remove. By experiment he had lately demonstrated that this staining was overcome by using three solutions, composed of twenty parts of permanganate of potash to one hundred, one part of oxalic acid to thirty-two.

The hands thoroughly cleaned to be immersed for two minutes in Solution No. 1:

Permanganate of potash.....	5 parts
Water.....	100 "

M.

After rinsing the hands in clear water, immersing them for a minute in solution No. 2:

Hyposulphite of soda.....	3 i
Water.....	O i

M.

While immersing the hands in No. 2 Solution, add to it Solution No. 3:

Oxalic Acid.....	3 ss
Water.....	O i

M.

This causes a double chemical combination, whereby a sodium oxalate and a sulphur dioxide are produced which have powerful bleaching and antiseptic properties.

The stain of the permanganate solution is instantly removed from the skin and finger nails, and after rinsing the hands in sterilized water they are ready to go into the peritonæum.

Permanganate of potassa has been used somewhat similarly for the bleaching of sponges; but the above is a reliable antiseptic preparation for the hands.

The Care of the Mouth.—In a recently published work Dr. Thomas, a German physician, calls attention to the great prophylactic value of buccal cleanliness (*Med. Rec.*) The best dentifrice, he says, is soap, which dissolves the mucus and removes it from between the teeth more thoroughly than any other substance. After a careful brushing with soap or

with the tincture of soap-bark (*quillaya saponaria*), some antiseptic should be used. The most efficient antiseptics for this purpose, either of which is capable of destroying the micro-organism in one minute, are thymol, 1 to 25,000, and corrosive sublimate, 1 to 5,000. The following is recommended as a useful and pleasant buccal disinfectant:

R	Thymol.....	gr. ij
	Benzole acid.....	gr. xl
	Tincture of eucalyptus.....	℥ ij
	Essence of peppermint.....	minim x
	Alcohol.....	℥ ij

M.

Sig.: Pour enough in a glass of water to render it turbid and use as a mouth wash.

Hereditary Syphilis.—The following was used by Mr. Jonathan Hutchinson with good effect in the case of an infant, some two months of age, afflicted with hereditary syphilis (*Archives of Surgery*):

R	Iodide of potassium.....	gr. ss
	Solution of bichloride of mercury.....	minim x
	Spirits of wine.....	minim iv
	Water.....	℥ j

M.

Sig.: To be taken three times a day.

The liquor hydrargyri perchloridi of the B. P. has one grain each of corrosive sublimate and chloride of ammonium, in two ounces of distilled water.

Preparations of Europhen.—Eichhoff gives the following in the *Zeitsch. d. Alleg. Oest. Ap. Ver.* says the *Med. & Surg. Reporter*:

R	Europhen.....	grammes v
	Olive oil.....	grammes x
	Lanolin.....	grammes lxxxv

M.

Sig: "Unguent."

R	Europhen.....	grammes j to v
	Olive oil.....	grammes x
	Gum arabic in powder.....	grammes x
	Distilled water.....	grammes cc

M.

For intra-urethral injections in blennorrhagia.

Chloralamid in Surgery.—Dr. Emory Lamphear is a warm advocate of this remedy. He states that the direction of W.

Hale White, of London, is a good one; viz., tell the patient to dissolve the powder in brandy, add water to his liking, and drink it shortly before going to bed; this combination with spirits is particularly good in our surgical cases where whiskey is usually indicated, at least in most major operations. If in any case it be better to have the medicine in liquid form, this combination may be prescribed:

R Chloralamid.....3 ij
 Spts. frumenti.....3 i
 Misce bene ut ft. solut. et adde:
 Syrupum rubi idæi.....3 i
 Misce.

Sig.: Dose, one teaspoonful, to be repeated in one hour if sleep is not produced. This makes a decidedly pleasant mixture of slightly acid taste and fruity aroma and flavor.

Expectorants.—The *Lancet-Clinic* says that Dr. Rossbach (*Ugeskrift for Læger*), praises the following:

R Morphine hydrochlorat.....gr. ss
 Apomorphine hydrochlorat.....gr. ss to j
 Veld. hydrochloric. dilut.....gtts. x
 Aq. destillat.....3 v
 M.

Sig.: A spoonful every second to fourth hour.

We have found the following efficient at times:

R Tinct. opii camphorat.
 Syr. pruni Virg.
 Fl. ext. glycyrrhizæ.
 Spts. frumenti.....aa 3 j.
 M.

Sig.: A teaspoonful every hour.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

Human Cud-Chewing.—Dr. Carl Læwe contributes a personal experience to the *Deutsche Medizinal-Zeitung* in respect to this peculiarity. He found at first, that after eating ordinary green salad, he suffered from increased malaise of the stomach until five or six hours later there was a regurgitation of small, somewhat macerated, portions which had no markedly sour taste. However, upon mastication the activity became apparent. Later on the same was observed in connection with meats and fats. After another interval different articles would regurgitate, especially after a hasty meal, and in particular when a quantity of air had been swallowed. In

these cases there was some fluid which accompanied the masses which appeared unchanged to the taste. The same phenomenon was observed after drinking coffee or using tobacco. The author regards the cause as being largely influenced by the anterior wall of the thorax. When the stomach is filled, it assumes a horizontal position and the action of the anterior thoracic wall in inspiration forces a portion of the contents in the cardia as this is the *locus minoris resistentiæ*. Besides this there is the suction effect and the muscular action of the œsophagus and pharynx which also aid in projecting the matter in an upward direction. The secondary mastication is merely excited by the presence of the food.

Absence of Rectum.—Dr. W. E. Baldwin reports the following to the *Medical Record*: The following case of congenital absence of the rectum, which came under my observation recently, may be of interest, owing to the age to which the child lived:

On August 29, 1891, I was called to see an infant, female, five days old, which had had no passage from its bowels. Soon after birth it had vomited what was undoubtedly meconium. On examining the child the anus appeared normal, but I was able to pass a probe only about one quarter of an inch. The child had nursed and slept as any healthy one would. I advised an operation, which was consented to by the parents. On September 4, I operated upon the child, endeavoring to reach the gut through the perineum, but was unsuccessful, the gut being too high up. I spoke to the parents regarding a colotomy or laparotomy, but they absolutely refused to allow either. The child recovered rapidly from the operation, still taking the breast every two hours and sleeping naturally. On September 11, the child still being in good condition, another attempt was made to reach the gut through the perineum, still with no success. The child readily recovered from the operation, nursing and sleeping naturally. On September 16, it vomited for the first time, the vomiting lasting for a few hours only. The child then began again to nurse every two hours and continued apparently healthy and in no pain until October 13, when still another unsuccessful operation was performed. On October 15, the child was very restless and in much pain, the abdomen was very tympanitic, and there was persistent vomiting of dark stercoraceous matter. This

continued until October 20, when the child died, being kept under the influence of opium meanwhile.

Post-mortem examination showed marked dilatation of the stomach and intestines, the ascending, transverse and descending colon being filled with fæces. The descending colon ended in a blind pouch just above the sacral promontory, the rectum being merely a fibrous cord. There were also marked evidences of peritonitis. This child lived to the age of fifty-six days, and nursed regularly about every two hours for forty-six days.

Xantho-Kreatinin.—Dr. G. Colasanti had occasion some time since to make certain observations on the urine of a lion (*Bullet. della Real Accad. Medica di Roma*). He found quite an appreciable quantity of xantho-kreatinin in this urine and his further study induced him to conclude that in animals which are purely carnivorous that there is not only a large quantity of kreatinin excreted by the kidneys but that, in addition to this, an appreciable amount of xantho-kreatinin is also eliminated. It appears that when there is an amount of kreatinin formed one portion of it finds its way in the circulation, and the final result is that there are found in the urine, kreatin, kreatinin, allantoin, and xantho-kreatinin.

The Proportion of Albumin in Urine.—*The Medical News* speaks of the unfortunate practice of designating the quantity of albumin present in urine by the proportionate bulk precipitated by heat which is justly criticised. That this procedure is not only crude and unscientific, but in its results absolutely inaccurate, is amply demonstrated by the data presented in the letter of a correspondent. Of course, the only accurate way of determining the quantity of albumin present in urine is by careful volumetric analysis. This, however, the busy practitioner has neither time nor inclination to carry out, nor is it absolutely necessary for ordinary clinical purposes. Approximate estimates here amply suffice. The *News'* editor says that his method has been to have a mental standard in accordance with the density and thickness of the ring developed by the contact-method of overlaying nitric acid with the urine in which the proportion of albumin is to be determined. In his hands the application of heat to the upper half of the column of clear, acid urine in a test-tube has furnished the

best results in the qualitative determination of albuminuria. When heat occasions a slight turbidity indicative of the presence of albumin, and the contact-method fails, he speaks of a trace. When however, he is able to detect a ring by the contact-method, he speaks of a thirty-second, or a sixteenth, or an eighth, or a quarter, or a half (and so on) per cent. in accordance with the density and thickness of the ring of coagulated albumin. Only approximate, the method answers admirably for comparative observations, and, while not precise, it possesses the virtue of not being grossly inaccurate and of not being a means of conveying false conceptions, both of which restrictions apply to the designation of the proportion of albumin according to the bulk of the precipitate thrown down by heat. It is at least highly desirable that some uniform method of designation should be adopted.

Bilateral Abductor Paralysis of the Larynx.—A female patient, aged nineteen years, was admitted into the Birmingham General Hospital, at the end of March, under the care of Mr. Gilbert Barling (*Birmingham Med. Rev.*). Laryngoscopic examination showed that the vocal cords closed accurately on phonation, and on quiet inspiration the utmost interval was barely one-sixth of an inch, whilst in deep inspiration this was somewhat diminished. As severe dyspnoea occurred at night, tracheotomy was performed; and a few days after, the faradic current was applied over the recurrent laryngeal nerves. Examination some ten days later showed marked improvement in the power of abduction. Seventeen days later, the respirations being normal and the abduction of the cords good, the tracheotomy tube was left out. Almost immediately the respirations began to quicken, and in a few days were almost as rapid as on admission and abduction was as imperfect as ever. The faradic current was again resorted to, and the patient exercised in slow breathing, while it was intimated that cold douching would be resorted to if improvement did not take place. The rapidity of breathing diminished steadily, and in June the respiration was almost normal and abduction was good. Soon after her leaving hospital the quick breathing returned, and at the beginning of 1891 the patient was readmitted in the same condition as when first seen. No permanent improvement following the use of the faradic current and intubation, tracheotomy was performed a second time. As be-

fore, it was followed by improved abductor power; and as plugging of the tube or removing it disturbed this function, the girl was discharged with her tube, to return for inspection some months later. Mr. Barling supposes that the condition was a functional one, depending on hysteria, and that it probably supervened on catarrhal laryngitis.

DISEASES OF WOMEN AND CHILDREN.

OBSTETRICS AND GYNECOLOGY. By E. S. McKee, M. D., Cincinnati.

Management of Retained Placenta in Abortions.—In abortions the radical and the conservative methods in the treatment of the retention of the placenta and membranes have their advocates in every country. It is seriously considered by some that the safety of the patient and the comfort of the physician is best served by the immediate removal of the secundines after the expulsion of the ovum, in every case where it can be done without force sufficient to injure the woman. The curette, in skillful hands and with the proper patient, is a means of good, devoid of evil, after abortion. Yet, under other circumstances, it is an instrument of danger. In the text-books we find remarkable unanimity in recommendation of the expectant plan, while the recent contributions to medical literature favor immediate removal.

Careful consideration of the facts and circumstances of each case will result in a more intelligent conduct than the observation of any dogmatic rule. All will accord that the early removal of the secundines is desirable, but the question arises, when is it best? Abortion is not physiological as delivery at term, but is a pathological process—a premature death, a breaking up and tearing away, an abnormal condition. Taking into consideration the dangers from septicæmia and hæmorrhage, the local inflammations, the organic changes, the sub-involutions and septicæmia arising from decidual retentions, render its early, prompt and thorough removal a matter of paramount importance. Safety, speed and completeness are the principal questions for consideration.

In the *ecouvillonnage* of Doléris we have a method of treatment which, for radical thoroughness, has many recommendations. By active intervention, we do not mean unnecessary interference. If those opposed to radical measures would

only treat the subject with justice, it would appear much more favorably in their eyes. Are we doing the proper thing when we sit and wait for the onset of sepsis before removing the remains? Immediate action may avoid the danger of septicæmia and save the life of the patient. The so-called expectant plan is an easy way, and, thanks to nature, is successful in a great majority of cases; but why wait for dangerous symptoms before active symptoms which may then be too late? The more frequent use of the curette would result in a fewer number of cases of peritonitis and septicæmia after abortion, and more remotely in avoiding many cases of chronic uterine disease which come under the care of the gynecologist. After radical treatment, the patient is less liable to be troubled with subinvolution, hypertrophy and displacement of the womb. The method is generally easy, and, if carefully done, is safe. Intra-vaginal injections of hot bichloride solutions should precede, and intra-uterine follow, this treatment.

The unfortunate doctor who is called to attend these doubtful, confusing and tormenting cases, should derive a large amount of comfort from the fact that gentlemen who have had quite an experience in this line, state that they have never lost a single case from hæmorrhage.

Great care should be exercised to avoid rupture of the membranes, as the expulsion of the ovum *en bloc* is particularly desirable.

Early aseptic precautions are advisable, preferably the intra-uterine injections of hot solutions of bichloride of mercury. The folly of deferring these precautions until the substance in utero begins to putrefy, is attested by numerous deaths. Iodoform in suppositories doubtless has the effect of preventing further absorption.

The faradic current is of considerable value in cases of uterine inertia. It produces and intensifies contractions, checks hæmorrhage, and hastens delivery. A mild current is all that is necessary, the main thing being its intermittency. In fact, a strong current is rather to be avoided, as it is prone to produce a spasm of the muscular tissue. This not only possesses the above named advantages, but also renders the patient's suffering much less.

To prevent abortion, use opium hypodermatically per orem or rectum: Quiet nerves, muscles and mind. Preparations

- containing viburnum prunifolium have done good work for me in allaying uterine contractions. Tampons will often dilate the cervix and hasten delivery, but are in many ways unsatisfactory and unsafe. They should consist of iodoform gauze or absorbent cotton balls, soaked in an antiseptic solution, renewed about every six or twelve hours, and the patient carefully watched. I do not use ergot until the uterus is empty. I prefer to dilate the cervix with Palmer's steel dilators, and for removing the contents use my finger. Where this—nature's excellent instrument—fails, Reamy's placental forceps will be found to act very nicely, having as recommendations simplicity, safety and efficiency.

Cancer of the Uterus.—Dr. T. A. Reamy says: When, by clinical examination, the disease appears to be confined to the portio-vaginalis, it having commenced at the junction between the pavement epithelium covering the vaginal aspect of the cervix, and the columnar epithelium of the canal, or in the provisional epithelium between these two lines, the site of origin in the majority of cases, the disease not having extended to the vaginal junction, in the pavement epithelium, its limitation to the portio may be assumed absolutely. Not one case out of five hundred, within the above clinical definitions, will, upon removal, show that other portions of the uterus are involved. Under such circumstances, how can it be possible for total extirpation to more effectually remove all diseased tissue than high amputation of the cervix? As a matter of fact, under the exact conditions named, all diseased tissue and all suspicious tissue would be effectually removed by amputation at the vaginal junction, a procedure which I still sometimes employ, although of late, in such cases, I usually make high amputation, thoroughly cauterizing every portion of the stump and walls left after incision with the Pacque-lin cautery, after the manner of Baker, of Boston.

The tendency of the disease, when it commences in the pavement epithelium of the portio, is not to involvement of the corpus, nor of the corporeal endometrium, next in order, but of the parametric tissues, on a level with the vaginal junction, and subsequently lymphatic involvement above this line, the corpus remaining healthy.

The perfect key formed by the uterus, in the arch sustaining the abdominal contents, cannot, in its usefulness, be over-

estimated. It further prevents descent of the intestines into the excavation left after its removal in hysterectomy, a position in which adhesions are likely to occur, and among other evils, as a result, recurrence of cancer in the intestinal peritoneum. I have had one such case. Again, the retention of the ovaries and corpus uteri leaves the woman in the same physiological state as before, a matter of no small importance. In this same connection is the fact that this much of the pelvic circulation is not interfered with. (a) Since most of these subjects have passed the menopause, the danger of pregnancy does not exist. (b) In those subjects who have not reached that period, pregnancy is not very probable after high amputation. (c) Should it occur in a subject after high amputation, where cicatricial contraction is sufficient to render dilatation and safe delivery improbable (this amount of cicatricial contraction being by no means always present after high amputation) an abortion would probably be justifiable. (d) This course not being elected, a Cæsarean section or a Cæsarean Porro may be done. Probably a still better course in such a subject would be to remove the ovaries after the patient had fully recovered from the cervical amputation. The tubes, if found healthy, need not be disturbed. Ordinarily, the danger from this operation would not be worthy of consideration. This would still leave the supporting arch and the complete circulation. It would, in my judgment, be far more surgical than the removal of the uterus, unless it could be shown that its removal was an element of safety against the primary disease.

Extra-Uterine Pregnancy has been observed by Pinard (*Le Bulletin Médicale*, Aug. 19, 1891) in seven cases recently. In these cases the primary accident and functional troubles occurred in every instance at the end of the first month. The foetus usually died before its complete development. In one case it was found of normal weight. The foetal cyst was generally immobile through adhesions in the abdominal wall, possibly mobile, as in his second case, when it prevented contractions which one could attribute to the uterus. The foetal cyst always presented two compartments—one foetal and one placental. Sometimes the foetal compartment was such as to render the extraction of the foetus difficult or impossible, as in his fourth case, where decapitation of the foetus was necessary.

The author thinks the benefits which accrue from a judicious surgical intervention are very great. The seven cases, together with three already reported, make ten women operated upon, with nine recoveries. The single woman who succumbed was operated upon in extremis.

The Induction of Labor Pains by means of the application of electricity to the mammary gland is reported by Freund (*Centralblatt fuer Gynækologie*). He applied the cathode to the gland and the anode to the abdomen. Five to seven milliamperes are suggested.

Galvanism in Gynæcology is discussed by Engelmann, of Kreutznach, in the *Deutsche Medicinische Wochenschrift*. He believes that a retrograde metamorphosis in fibroid tumors is seldom had under galvanism; at least, enough to show sensible diminution in size; endometritis is benefited, hæmorrhage and leucorrhœa disappear, pressure symptoms are relieved, reflex neuroses disappear, and he thinks the method of value as an adjunct to other plans.

SURGERY.

Anæsthetics in Germany.—The Berlin correspondent of the *Occidental Medical Times* says: Operations in Germany are performed almost exclusively under chloroform. I do not know of any operator of note using ether. Of late bromide of ethyl has been occasionally recommended for short operations, and it is warmly praised by Professor Köllicker, of Leipzig. I have occasionally seen it employed in Hamburg, and have been favorably impressed with it. Lately a Dr. Schleich, of Berlin, has tried a combination of chloroform, ether and cocaine, in the following manner: The patient first inhales a small quantity of chloroform, not sufficient to make him entirely unconscious; the parts to be operated on are then sprayed with ether from a Richardson's atomizer, and lastly a number of injections of cocaine in minute doses are given with a Pravaz syringe. Dr. Schleich has performed quite a large number of operations under this method, and lately even abdominal section, with a most satisfactory result. The number of injections required amounted to between forty and fifty, the total quantity of cocaine used being about one grain. The patients were thus kept in a semi-somnolent state, were able to respond to questions but appeared to feel no pain at all,

which they confirmed on returning to consciousness. Thiersch, of Leipzig, obtains a similar anæsthesia by a judicious combination of morphine with chloroform, analgesia being perfect without complete loss of consciousness; but his method does not seem to have come into general use. In Hamburg a new apparatus called a "psychroter" has been lately introduced, and appears to be of value, although it is too early to commit one's self to a decided opinion. The principle consists in utilizing compressed fluid carbonic acid for the induction of local anæsthesia.

The Loofah as an Aseptic Scrubbing Brush.—Dr. John B. Roberts says in the *Medical News*: The desire of surgeons to obtain a clean brush for scrubbing the skin before operations, in order to remove accumulations of epithelium and bacteria, makes a cheap article a desideratum.

I think that small pieces of the Egyptian loofah, which is found in all drug stores for use in the bath-room, meet the indications admirably. For a number of years I have used pieces of this material for cleansing the skin before operations. A single loofah costs about ten cents, and is large enough to be cut into ten or a dozen pieces. After use these pieces may be thrown away, as the cost is rather less than a cent each.

This vegetable scrubbing brush, as it may be called, is of course of no value in cleansing a surgeon's nails, because it will not enter the subungual spaces as will the bristles of a brush.

I usually carry in my operating-case three or four pieces of loofah for scrubbing patients. It comes compressed like sponges, and a piece cut off before the loofah has been soaked in fluid can be carried in a small compass in an operating-case. For hospital use, pieces of loofah can be kept soaking in sublimate solution until used, and then thrown away, or soaked again, as the more expensive nail brushes are treated.

Outstanding Ears.—Mr. William Thomas, of Birmingham, describes, in the *British Medical Journal* for October 17, 1891, the following operation by which he has succeeded in making flaring ears lie close to the head. The operation consists in the removal from the inner surface of the pinna of an elliptical piece of skin, dividing the cartilage of the pinna down the centre of the exposed cartilaginous surface, and unit-

ing the margins of skin by sutures. The widest part of the skin removed should be from half to three-quarters of an inch, but of course this depends on the degree of deformity. It is necessary to divide and turn back the cartilage, not only to remedy the deformity but also to allow of easy approximation of the skin margins, and care must be taken to avoid division of the outer skin with the cartilage. The after-treatment consists in the application of a small cotton-wool pad between the head and the pinna—the latter being fixed by a bandage until healing is complete. Immediately union takes place, and there is hardly any perceptible scar, the skin of the ear having great vitality. A simple method of keeping the outstanding ears back without operation is to fix them by a piece of lint soaked in collodion, and placed between the pinna and the head, the ears being bandaged close to the head until the collodion is firmly set. The adherent splint thus formed will hold the ear in position for two or three weeks, when it may be renewed. It is, however, only a temporary measure. The principles of the operation are applicable to various malformations of the pinna.

Bone Wiring.—Dr. J. J. Buchanan is a warm advocate of this method (*Pittsburgh Med. Rev.*) and gives the following as the method of applying the wire suture :

1°. Use strict antisepsis, not only on general principles, but with special reference to the fate of the wire loop, which will remain harmless in the bone if asepsis be attained, but which will in all probability require subsequent removal in case of suppuration.

2°. Make free incisions to expose the point of fracture. In many cases spiculæ of bone will be found to require removal or replacement, which through an insufficient opening might escape observation. Free exposure of the seat of fracture also makes the wiring easy and insures against leaving portions of soft tissue between the fragments to defeat union.

3°. Regulate the size of the wire by the size of the bone and the amount of tension which it will probably have to endure. The perforations should of course correspond to the size of the wire, and may be made by a simple Brainard drill. I prefer, however, and always use the Hamilton drill.

4°. Whenever aseptic conditions are present or can be attained, cut the wire short and turn the ends down between

the ends of the bone. Under these circumstances no fear need be entertained that the wire will ever give trouble or make its presence manifest in any way. In case the situation of the bone is such that asepsis is impossible of attainment, as in compound fractures of the jaw, opening into the mouth, or in fractures already in a state of suppuration, it is better to leave the wires long and let the ends protrude from the wound. In such cases the subsequent removal of the wire will be facilitated if we count the number of twists to which it is subjected, for in the removal we will then know exactly when to stop untwisting it.

He presumes that little objection will be made to the wiring of compound fractures, but it is difficult to secure the patient's consent to a resort to it in simple fractures. Nevertheless, he is convinced that the time is not far distant when a large proportion of these will be treated on the common-sense plan of free exposure, accurate coaptation, suture of fragments and exact closure of wound.

Treatment of Suppurating Inguinal Glands.—Mr. H. Percy Potter states in the *Practitioner* that the surgeon frequently meets with cases of chronic suppurating glands with one or more sinuses, which cause but little pain and inconvenience, yet have no tendency to heal save with perfect rest on the one hand, or with the more vigorous measures about to be described on the other.

The condition referred to is one occurring as a sequel to an excoriation of the lower extremity, a strain of the structures of the groin, or suppuration without any definite history or objective sign indicating the cause. It is far from uncommon to find in surgical practice, say, a young woman with absence of venereal sores, excoriation, discharge, or sign of injury, complaining of painful and swollen, perhaps suppurating, glands of one groin, and this too without evidence of struma or anæmia. In a large percentage of cases, without any assignable cause, simple adenitis makes its appearance in connection with the glands running parallel with Poupart's ligament. The inflammation seldom ends in resolution, because the patient fails to recognize the importance of rest; thus suppuration ensues, and if the abscess discharge spontaneously, or if it be incised, a sinus remains leading to a gland, and this passage is found to burrow both superficially and

deeply. In these simple non-specific cases the granulations are doughy, velvety, anæmic, and easily separable. The pus undermines the skin with purple discoloration; the integuments are thinned, and the healing process is tedious in the extreme. The destruction involves the tissue around the glands rather than the glands themselves.

From a late experience of ten cases (males three, females seven), in which chronic indolent sinuses existed, an anæsthetic was administered and free scraping with Volkmann's sharp spoon performed, as well as the removal of the glands and sloughing adenoid tissue. The surface is first cleaned and rendered as far as possible aseptic. In practice it is not found necessary to divide bridges of tissue between neighboring sinuses, so long as the under surfaces of these are carefully scraped. The spoon is freely applied to all parts covered by granulations, and a smaller-sized instrument passed along the canals leading deeply. All exposed glands are torn away or twisted from their attachments, and the bed on which they lie scraped. The cavity is washed out with a solution of chloride of zinc (twenty grains to one ounce), a thick pad of antiseptic gauze is applied, and firm pressure maintained by means of a spica bandage. As a precautionary measure, and in the more extensive operations in order to avoid movement, an outside bracketed splint is used.

A Venereal Congress.—A project is now under discussion by different boards of the Paris municipal government to establish an International Congress to consider questions connected with prostitution and the limitation of venereal diseases. It is proposed to hold the congress in Paris in 1893, and to invite medical men, lawyers, sanitary officials, and political economists.

Lying-In Department of the New York Post-Graduate Medical School.—Mrs. C. P. Huntington has given the directors of the New York Post-Graduate Medical School \$2,000, a sum sufficient to defray the expenses of the lying-in department for one year. Professor von Ramdohr will have charge of this department, at 543 East Thirteenth Street, where instruction in obstetrics will be given to graduates in medicine only.

Book Reviews.

A Text-Book of Physiology. By M. FOSTER, M. D., LL. D., F. R. S., Professor of Physiology in the University of Cambridge, England. Fourth American from the fifth English edition, thoroughly revised. Octavo 1072 pages, 282 engravings. [Philadelphia: Lea Brothers & Co., 1891. Price in cloth, \$4.50. Leather, \$5.50.]

The name of Michael Foster has been so long, and honorably connected with physiological research, both in England and America, and this book is so well known to students of physiology that to notice it, beyond stating that it is a new edition, is almost a work of supererogation. The work has already passed through four English and three American editions, and this, the fourth American, from the fifth English, comes to us as the most complete compendium of physiology ever offered to students.

In preparing the present edition the author, and his associates and assistants, have carefully gone over the entire field of modern physiological (and histological) discovery, eliminating all that had been proven incorrect, and adding those discoveries made by the advances in physiological chemistry, microscopy and experiment since the last edition. This has involved a vast deal of close and conscientious work which has been done so thoroughly that the book might well stand as an epitome of human knowledge in all that regards the functions of the various portions of the animal economy.

The additions to the text of the last edition are largely histological; and while this has been done, as the author remarks, not with the view of discouraging the study of textbooks of histology, but of illustrating and explaining the physiological functions of the parts described, it has nevertheless been so thoroughly done that we have no hesitation in affirming that the student who masters these details will have a better knowledge of animal histology than nine out of ten who have taken the ordinary medical college courses in the latter study.

The work is profusely illustrated, the engravings being gen-

really of excellent quality. The larger portion of them are new, but many of them are not, and some of the latter are time-honored copies after Koelliker, Dalton, Sherrington and other authorities.

The English (fifth) edition of the work was originally issued in four parts or books, and we think it would have been better if the American publishers had issued their edition in two volumes, as the book is very heavy and cumbersome and soon tires the hand of the student.

The American editor has done his work well, his additions being always apropos and tending toward rendering the English text more clear to American students who as a general thing lack the preliminary education of their English brethren. The book is well, though not so fully indexed as it might be, and is published in the Lea's well known substantial manner.

History of Circumcision from the Earliest Times to the Present. Moral and Physical Reasons for its Performance, with a History of Eunuchism, Hermaphroditism, etc., and of the different Operations Practiced upon the Prepuce. By P. C. REMONDIUS, M. D. 12mo., pp. 346. [Philadelphia and London: F. A. Davis. 1891. Price, cloth, \$1.25; paper, 50 cents.

This interesting little book is No. 11 in the Physicians' and Students' Ready Reference Series. It is the amplification of a paper, the subject of which was, "A Plea for Circumcision; or the Dangers that arise from the Prepuce," which was read before the California State Medical Society in 1889. In the preparation of this paper, the author gathered so much material that he could not incorporate it in an essay which was necessarily limited in length. This led to a further study of the subject, and the elaboration of the whole resulted in the book before us.

The author has written an interesting and curious work, as well as a useful one. He traces circumcision back into the mists of antiquity, and reviews the subject not only in antiquity but in modern times as well, tracing its progress through the intervening spaces of time, giving at the same time the various methods practiced among civilized and savage peoples. He then reviews curious practices on the prepuce,

such as infibulation, muzzling, etc. Various other customs, such as emasculation, castration and eunuchism, are considered. The benefits accruing from circumcision are recited, and we find that the author is an earnest advocate of the measure.

The various pathological conditions, which are direct results of a long foreskin, both local and general, neurotic, functional and organic, are detailed in a manner which is apt to carry away the reader. The earnestness displayed, the knowledge brought forward, and proofs adduced, show that the writer is one thoroughly grounded in his subject.

The work is one to be carefully read, not only by the physician but by the layman as well. Many an ill-founded prejudice would thereby be removed, and comfort as well as comparative immunity from many serious disorders be thereby assured to male children.

As a historical study, it is worthy the perusal of every one at all interested in the history of the progress of the race.

The publisher is to be congratulated in having had the opportunity to issue such a valuable monograph.

A Treatise on Practical Anatomy. For Students of Anatomy and Surgery. By HENRY C. BOENNING, M. D., 8vo., pp. 481. Illustrated with 198 wood engravings. [Philadelphia and London. F. A. Davis. 1891. Price, Cloth or Oilcloth, \$2.50.]

The author's aim has been to write a book which would serve as a text-book on anatomy and as a dissector. He has succeeded in producing a good work, and one which is destined to be read. Aggressive in nature, he has not hesitated to attack some of the old accepted dicta, and, this alone, is proof enough of the fact that the work before us is replete with originality. Having been for years connected with the teaching of anatomy he is well qualified to write a work upon the subject. This is what he has done; he has written and not compiled the book which we have before us.

We do not desire to appear carping, but to our mind the chapter on the lymphatics disposes of the subject in too summary a manner. While it is true that this part of anatomy is distasteful to students and avoided by teachers, the usefulness of a knowledge of the anatomy of the lymphatic

system cannot be too highly regarded, and enough has been determined and figured to make a very interesting chapter.

We do not find a mention of Lushka's gland, and the fact that it is merely the caudal artery rolled up. Nor do we see any allusion to Skene's tubules in the female urethra.

These, however, are minor defects. A commendable feature of the work is the large type in which it is printed. Dissectors, as a rule, are in such small type that the labor of deciphering the text greatly retards the practical work in anatomy of the student who avails himself of the aid furnished by such works.

The illustrations of the work are good, and the mechanical execution unexceptional.

Handbook of Materia Medica, Pharmacy and Therapeutics. By SAMUEL O. POTTER, A. M., M. D., M. R. C. P. (London). Third Edition revised, 8vo. pp. 767. [Philadelphia: P. Blakiston, Son & Co., 1891. Price, cloth \$4.00, leather \$5.00.

Scarcely a year has passed since the second edition of this standard work was published, yet so great has been the demand for it that that edition was rapidly exhausted and another is already upon the market. This phenomenal popularity is due entirely to the intrinsic merits of the work and the practical style in which Messrs. Blakiston, Son & Co., have put into the hands of the profession.

As stated in our notice of the second edition of the work just one year ago, the author has condensed into a single volume, not too bulky for general study and consultation all the essentials of such a knowledge of materia medica and therapeutics, pharmacy and prescription writing, special medication, etc., as will be found most useful to the general practitioner of to-day. Beside these there is an introductory of some fifty pages in which the author gives a general view of materia medica, pharmacy and therapeutics in their several relations to the science of medicine, together with well considered chapters on rational and empirical therapeutics, and a general classification of medicines.

The author has also added an appendix of about 130 pages in which are given a brief but comprehensive review of Latin medical and pharmaceutical phrases and terms, declensions

of nouns, etc., formulæ for hypodermic medication, tables of poisons and their antidotes, obstetrical memoranda, etc., etc.

The book is brought down to almost the present hour, so far as new remedies, etc., are concerned, its last revision bearing date of September 1891. It has a patent index and is otherwise faultlessly gotten up. We cannot too highly recommend it to students and practitioners of medicine.

Literary Notes.

Pamphlets Received.—On Dermatol a Proposed Substitute for Iodoform. Its Use in Surgical Practice, by Charles A. Powers, M. D. (From *Medical Record*, October 17, 1891); Some Facts Every Practitioner Ought to Know about Squint, by Albert Rufus Baker, M. D.; A Case of Pemphigus Follicularis ending Fatally within Eight Months, by Herman G. Klotz, M. D. (Extracted from *Am. Jour. Med. Sci.*, December, 1891); Intubation of the Larynx, by Carl H. Von Klein, A. M., M. D. (Reprinted from *Cleveland Med. Gaz.*, August 1, 1891); A Vegetable Plate: Also a New Technique in Intestinal Anastomosis, by Robert H. M. Dawbarn, M. D.; Presentation of Two Patients, Illustrating the Favorable Progress of Suppurative Knee-Joint Disease, by Milton Josiah Roberts, M. D. (Reprinted from *New York Med. Monthly*, August 1888); Cancer of the Uterus and Its Rational Treatment, by G. Wiley Broome, M. D. (Reprint from *Weekly Medical Review*, November 7, 1891); The Technique of Cerebral Surgery, by G. Wiley Broome, M. D. (Reprint from *Weekly Medical Review*, November 21, 1891); Who Can be Medical Experts, by Henry A. Riley, Esq. (From *Medical News*, November 14, 1891); Announcement of Medical Department University of Wooster, Cleveland, Ohio, for 1892; Announcement of Louisville College of Dentistry for 1892; Addresses, Papers and Discussions in the Section of Oral and Dental Surgery at the Forty-Second Annual Meeting of the American Medical Association, at Washington, D. C., May 5 to 8, 1891; Annual Report of the St. Louis Health Commissioner for 1890-91; Announcement of Louisville Hospital College for Medicine for 1892; The

Post-Partum Douche, by Edwin Pynchon, M. D. (Reprinted from *North American Practitioner*, October, 1891 and *Chicago Medical Recorder*, October, 1891); The Development of the Sections of the American Medical Association, by Leartus Conner, M. D. (Reprinted from *American Lancet*, June, 1891); Other Methods of Promoting the Development of the Sections, by Leartus Conner, A. M., M. D. (Reprinted from *Jour. Am. Med. Ass.*, August 22, 1891.) The Climate of Southern California in Relation to Disease, by William A. Edwards, M. D. (Reprinted from the *Climatologist*, August, 1891.); Bald Heads, by Albert E. Carrier, M. D. (Reprint from the Transactions of the Mich. State Med. Soc., 1891.); Experiments and Researches on Trap Siphonage, showing the Comparative Merits of the Principal Appliances used for Trap-Seal Protection, by James M. Denton, M. E. (Reprinted from Vol. XVI, of the Trans. Am. Public Health Ass., 1891.); A Plea for the Extra-Peritoneal Treatment of the Stump in Abdominal Hysterectomy for Fibroids, by A. Laphorn Smith, B. A., M. D., M. R. C. S., E. F. O. S. L. (Reprinted from *Canada Lancet*, January, 1891.); The Work of Medicine for the Weal of the World, by C. H. Hughes, M. D. (Reprint from *Alienist and Neurologist*, January 1892.); The Statistics and Lessons of Fifteen Hundred Cases of Refraction, by Geo. M. Gould, M. D. (Reprinted from the *Journal of the Am. Med. Ass.*, September, 19, 1891.); The Aurora Epidemic, by E. J. Beall, M. D. (Reprint from *Daniel's Texas Medical Journal*, October, 1891.)

Books Received.—The following books were received during the past month and will be reviewed in future issues of the JOURNAL:

Age of the Domestic Animals. Being a Complete Treatise on the Dentition of the Horse, Ox, Sheep, Hog and Dog, and on the Various other Means of Determining the Age of these Animals. By Rush Shippen Hindekoper, M. D., 8vo., pp. 225. Illustrated with 200 Engravings. [Philadelphia and London: F. A. Davis. Price \$1.75.]

A. B. C. of the Swedish System of Educational Gymnastics. A Practical Hand-Book for School Teachers and the Home. By Hartwig Nissen, 12mo., pp. 107. With 77 Illustrations. [Philadelphia and London: F. A. Davis. Price 75 cents.]

Lessons in Diagnosis and Treatment of Eye Diseases. By Casey A. Wood, A. M., M. D., 12mo., pp. 154. With numer-

ous wood-cuts. (Physicians Leisure Library). [Detroit: Geo. S. Davis. Price 25 cents.

Transactions of the Association of American Physicians. Sixth Session, 1891, Vol. VI, 8vo., pp. 319. [Philadelphia: Printed for the Association, 1891.

Surgery: Its Theory and Practice. By William Johnson Walsham, F.R.C.S. Third Edition, Revised and Enlarged with 318 Illustrations. Small 8vo., pp. 748. [Philadelphia: P. Blakiston, Son & Co., 1891. Price, cloth, \$3.00, leather, \$3.50.

The Physician as a Business Man; or, How to Obtain the Best Financial Results in the Practice of Medicine. By J. J. Taylor, M. D., 12mo., pp. 144. [Philadelphia: *Medical World*, 1891.

The *Medical Review* Visiting List. Perpetual. [St. Louis: J. H. Chambers & Co. Price 75 cents.

Saunders' Pocket Medical Formulary, With an Appendix Containing Posological Table; Formulæ and doses for Hypodermic Medication; Poisons and their Antidotes; Diameters of the Female Pelvis and Foetal Head; Diet List for Various Diseases; Obstetrical Table; Materials and Drugs Used in Antiseptic Surgery, Etc. By William M. Powell, M. D., 12mo., pp. 261. [Philadelphia: W. B. Saunders, 1891. Price, cloth, \$1.50; tucks, \$1.75.

Society Proceedings.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

November Meeting. The President Dr. William E. Moseley in the chair.

Dr. John Morris gave an address entitled "A Parting Word upon Obstetrics."

I began the practice of obstetrics forty-six years ago, and for the first four years kept a record of my cases. The first year I attended thirty-five cases. I was associated with Dr. Hintze who at that time had a very extensive general practice and who was very often called to assist midwives in their troublesome cases. I kept a careful record of my first two

hundred cases, but after that I abandoned the record, a fact which I have since very much regretted.

My first case was a very unfortunate one ; I attended the patient in my student days. This woman was in the country, and was in labor three days. At the end of that time I sent for Dr. Hintze who delivered her with the crochet. On account of the long impaction of the head, the whole of the anterior wall of the vagina sloughed away. The woman is still living, but so much tissue was destroyed that it was quite impossible to close up the opening, and all these years the urine has been passing from her as rapidly as secreted.

My second case was a black woman who had a prolonged labor. I had never seen the forceps used but tried to put them on and failed. After a while the child was born without any artificial assistance.

One of my great difficulties in my first cases was to find the cervix. I had never had any practical instruction in obstetrics and did not know that in the first stage before much dilatation the os is usually found far back against the sacrum.

Among other things that I think I have learned is how to shorten labor. One of the best means of accomplishing this is by external pressure. I learned that from my master, Dr. Hintze. Another was to pass the cervix around the occiput ; and I found that these two shortened labor very considerably. I think I acquired the art of preserving the perineum. I believed in keeping the head under control and not allowing it to be delivered too rapidly. In Ireland I learned how to preserve the perineum when using forceps. The secret is simply to change the axis of traction as the head comes to the perineum first upwards, perpendicular to the bed, and then carrying the handles far over on to the abdomen of the mother.

I have found that midwifery is underrated in the profession ; but I am convinced that in no branch is there greater opportunity to display skill and judgment. This branch is esteemed much more highly now than formerly.

Formerly in conditions of rigid cervix it was the practice to bleed. I have done it many times but it would not be tolerated now.

I am convinced that hot water injections will assist in relaxation.

I have no faith in belladonna.

I have been fortunate in not seeing any cases of hæmorrhage. I believe external pressure used during labor will prevent post partum hæmorrhage.

For the first ten years I used ergot in nearly every case during the second stage ; but have not used it now for fifteen years. In cases of delayed labor I now prefer the forceps to ergot.

The crochet has gone out of use, but formerly it was used frequently. Often the woman was injured, and not infrequently the doctor's fingers suffered.

Dr. Hintze had a glove to protect his fingers.

We had at that time no chloroform, and often in transverse positions the woman would die undelivered because it was not possible to turn and deliver. I have not habitually used anæsthetics except in forceps cases. I have thought that they prolonged the labor, but I always use chloroform when any force is to be resorted to.

I have never used the binder, because I could never see the philosophy of it. It will not stay in position and it is absurd to think it controls hæmorrhage.

The only good that I could ever see that it accomplished was to please the woman.

When to use forceps—always use forceps when labor is delayed in the second stage. The old forceps were a much weaker instrument than the ones constructed on the Tarnier principle. I think the Tarnier forceps the greatest advance in obstetrics in my time.

In placenta previa and in abortion we formerly used a tampon made of a handkerchief, rags, cotton or anything that could be had. These tampons were dirty and dangerous. Later I have used only the colpeuryntur. It assists to dilate the os as well as being the most efficient tampon. It is clean and harmless.

Opium is the best thing to relieve pain in labor. It does not arrest the labor. When the os is dilated it increases the contractions.

Dr. F. E. Chatard exhibited to the society the obstetrical instruments used by his grandfather, 1810-1840, and also those used by his father, 1835-1875.

He stated that he had used external pressure with apparent good effect.

Dr. Wilmer Brinton stated that external pressure was used by primitive people. He thought that in rigid os he had gotten good results from the administration of chloral in fifteen grain doses every fifteen minutes until three doses were given, as recommended by Playfair. But the number of cases in which he had given chloral was small.

Dr. G. Lane Taneyhill had used chloral per anum with great satisfaction in three cases. In less than an hour the os had been considerably dilated, and delivery was effected in each case within three hours, other remedies having failed. He had learned this treatment from our learned fellow member Dr. Williams—he used thirty grains chloral in milk.

Dr. P. C. Williams thought it was very important to consider agents to relax the parts. Chloral in forty to sixty grain doses per anum had given good results, but sometimes it, as well as chloroform fails to completely relax the cervix.

In his earlier experience he had encountered many cases of post partum hæmorrhage, but since he had made use of a practice that is condemned by most obstetricians, that of giving ergot before chloroform, yet he had not a single case of hæmorrhage. He had seen no harm result from this practice but thought he had in this way shortened the labor.

The objection to morphine to relieve pain is that it nauseates badly afterwards. Chloral must be pushed to get good effects. The objection to it is that sometimes it leaves the patient more or less delirious, and may seriously depress the heart if given too frequently.

Dr. William S. Gardner had used chloral in fifteen grain doses repeated every fifteen minutes in a series of cases, and found that while the patients had very little relief from pain, that a large percentage of them would be made sick at the stomach, and the discomfort caused by the disagreeable taste of the drug and by the vomiting following its use, more than counter-balanced the little good it did, and its use in this way was abandoned.

He gives it frequently for the relief of false labor pains. A dose of thirty grains will almost invariably relieve the pains and put the woman to sleep.

Dr. Wm. P. Chumm had used chloral a number of times but could get no positive evidence of its value, but it does not

seem to obtund the pain. If opium will do this it might be advisable to use it.

Dr. L. E. Neale was surprised that a discussion as to the value of chloral should be brought up. He thought that the time for discussion of that subject had passed.

Whether it would act more efficiently by the rectum or by the stomach he did not know. But he thought sixty grains too large a dose and would be afraid to use that much as an ordinary dose by the mouth.

The remarks were entirely too general to admit of special discussion.

WILLIAM S. GARDNER, M. D., Secretary.

712 N. Howard street.

CLINICAL SOCIETY OF MARYLAND.

WM. B. WATSON, M. D., Secretary.

BALTIMORE, December 4, 1891.

The 258th regular meeting was called to order by the President, Dr. Robert Johnson.

Dr. THOMAS OPIE read a paper on THIRTY-TWO UNSELECTED ABDOMINAL SECTIONS. These cases were operated upon by Dr. Opie, at the Bath City Hospital, in the twelve months ending October 31, 1891. The conditions for which the operations were performed were as follows: Ovarian Tumors, 6; Chronic Ovaritis, 7; Fibroid Tumors, 4; Pyo-Salpinx, 5; Retroflexions, with adhesions and dysmenorrhœa, 3; Exploratory Incisions, 3; Extra-Uterine Pregnancy, 1; Cyst of Broad Ligament, 1; Cystic Degeneration of Ovary, 1. The number of deaths was four, as follows: Oöphorectomy for double pyosalpinx, 1; Shock from ovariectomy, 1; Oöphorectomy for acute mania, 1; Abdominal hysterectomy for fibro-cystic tumor, 1.

Stitch abscesses occurred nine times, most frequently in cases where the drain tube had been used. Early opening of the abdominal dressings favor their occurrence. When the dressings remained intact for seven days, there seemed to be greatest immunity from the stitch abscess. Dr. Welch says that the staphylococcus epidermis albus is the most common cause of stitch abscesses in wounds treated aseptically and antiseptically.

Drainage was used in but three cases. In one case it retarded convalescence; in another it seemingly did no good, and a small superficial abscess at the entrance of the tube followed its withdrawal; in the third case an abscess also occurred at the site of entrance. A plentiful supply of fine, properly prepared elephant-ear sponges will do away with the necessity for flushings in most cases, and remove the need for drainage. They are efficient helps in keeping the abdomen free from infection. They can be utilized in keeping back the intestines, in occupying the cul-de-sac, in positions below the pedicle, in taking up blood or secretions, in staunching hæmorrhages, in separating adhesions, in protecting the intestines while closing the abdomen.

Drainage is doing more harm than good, and ought to be abandoned by the abdominal surgeon. The oft-repeated removal of dressings of the patulous drainage tube must, of necessity, be a very great danger; surely, it favors decomposition and invites germs. After an anæsthetic, restlessness and jactitations are not wholly restrainable, and it is easy to see how physical injury may accrue to the patient during this time from these smooth, but not at all innocent, glass tubes. When the laboratory physician says that bruised tissue is a paragon field for the cultivation of germs, let us heed the warning and cast aside the drainage tube.

Dr. Parkes says, as to drainage: "Views and practices concerning drainage have materially changed even since the antiseptic era began. Our predecessors drained to permit the escape of pus which they knew would form. Until lately, we have drained in order to prevent its formation. We seem now to be on the eve of an era when we need to drain but little, or not at all. We resort to drainage now only of necessity in septic or infected cases. In other cases, we drain mostly from habit or from fear. Indeed, when we start afresh, as it were, without previous infection, the practice of drainage is a confession of fear or of weakness, both of which are alike unscientific and unfortunate. It even seems to me that in many cases, where all other aseptic requirements have been met, we do much more harm than good by the use of drains."

DR. W. S. THAYER spoke of THE TREATMENT OF FIVE CASES OF MALARIAL FEVER WITH METHYLENE BLUE, at the Johns Hopkins Hospital. Immediately after the appearance

of the article in the *Berliner Klinische Wochenschrift*, for September, 1891, in which Gulmann and Ehrlich described the successful treatment of two cases of malarial fever with methylene blue, this treatment was begun with the cases of malarial fever entering the hospital. So far, only five cases have been treated.

One case of tertian ague yielded immediately to methylene blue, 0.1 five times a day. No rise of temperature after beginning of treatment; no organisms in the blood after the third day.

A severe case of quotidian ague had one chill, twenty-six hours after the beginning of the treatment (methylene blue 0.1 every four hours), and a lesser rise of temperature without chill on the two successive days. After this, the temperature was normal. No plasmodia seen after ninth day.

In a case of chronic malaria, with pigmented crescents and small intra-cellular hyaline bodies in the blood, no organisms were seen after the ninth day, under methylene blue 0.2 four times a day.

In two cases of severe chronic malarial remittent, the temperature fell to normal in a few days; but there were occasional returns of slight fever, and the organisms—hyaline bodies and pigmented crescents—had not entirely disappeared in forty-one and twenty-three days respectively. (In the former case, after eleven days' treatment with quinine, a moderate number of organisms was still present.)

In all the cases, the drug was given as a powder in capsules. Slight burning sensations with micturition were usually present after taking the drug, and were relieved by small quantities (one-fifth of a teaspoonful) of powdered nutmeg, several times a day. The urine, under treatment, was of a deep blue color. The fæces, when passed, were not colored, but on exposure to air turned rapidly blue. The sweat and saliva were not colored.

The number of cases yet treated is, of course, too small to give a sufficient basis for any definite opinion as to the relative value of this drug and quinine. The experience is sufficient to show that methylene blue has a definite curative influence on malarial fever, and to warrant its further trial.

DR. I. E. ATKINSON said that the discouragement which one nearly always finds in treating malarial diseases with

other remedies than the derivatives of cinchona bark, is due to the extreme usefulness of cinchona bark itself, for it is so promptly antidotal in its effects in these disorders that we are apt to be discouraged and not persist in the treatment by other agents. The testimony given to us by Dr. Thayer seems to show that in methylene blue we have another agent in the treatment of these disorders. The effects of the use of quite dissimilar drugs in these diseases is remarkable. Of course, we all know the value of arsenic as an antimalarial remedy, and we know that iodine possesses properties in this direction—inferior to quinine—but still pronounced. Some years ago, prompted by some papers published by a physician connected with the English army in India, who claimed that iodine had properties equal to cinchona bark, Drs. Atkinson and Hiram Woods made some observations on the treatment of malarial intoxication with iodine. The results of these investigations showed that, while iodine has undoubted antimalarial properties, yet, in a large proportion of cases, it will fail absolutely. There is a wide range of remedies that possess this antimalarial property, and which would be valuable if we did not have cinchona bark to use. The investigation reported by Dr. Thayer is most interesting and important, and further progress will be awaited with interest.

DR. HARRY FRIEDENWALD read a paper on CHOLESTEATOMA OR PEARL TUMOR OF THE EAR. Cholesteatoma is a bright white growth, of pearly lustre and smooth surface, made up of distinct layers placed concentrically over each other; has no blood vessels, and, when examined microscopically, is seen to be made up of layers of large, flat, non-nucleated, polyhedral cells, stratified in layers. These cells are in every respect similar to the cells of the outer layer of the epidermis. Between them are found cholesterine crystals. The growths occur in the middle ear, and in the mastoid cells; here they lie in cavities which they frequently enlarge to very great size. The cavities have a very smooth surface, and are lined by a very fine membrane, which consists of a layer of periosteum upon which lies a rete malpighii. This is the capsule which surrounds and produces the growth. These growths are often found in cases of chronic suppurative inflammation of the middle ear, with perforation or destruction of the drum head, and frequently with polypi. But these growths have

also been found without any other or any previous disease of the middle ear, and with a perfectly normal drumhead. It has likewise been found in other cranial bones and in the pia-mater.

Three cases of cholesteatoma, one small one with a minute perforation in Shrapnell's membrane; a second, larger, in which the outer bony wall of the middle ear had been completely destroyed; and a third, very large, and occupying a great part of the mastoid cells, which had perforated both externally and internally into the cranial fossa, were described.

The various views regarding the origin of cholesteatoma were then discussed. Virchow regards it as a heteroplasmic tumor, whether found in the pia mater or in the bones of the skull, and analogous to epithelial carcinoma. Other observers find its origin, in accordance with this view, in the embryonic development of the labyrinth from an involution of the epiblast or in an involution of the epidermis in the first branchial cleft, whose destiny it is to develop into the eustachian tube and middle ear. A view distinctly different from the above is, that cholesteatoma is a desquamative process of the membrane lining the middle ear; that it is an inflammatory product which is retained in the spaces of the middle ear, and by gradual accumulation forms a tumor. This is the theory of Von Troeltsch. The difficulty encountered here lies in explaining how a cavity normally lined by a mucous membrane can cast off cells of an epidermoid form, and, even more, can take on all the characteristics of epidermis with a well-defined rete malpighii. Von Troeltsch believed that the products of inflammation by irritating and pressing upon the mucous membrane caused the desquamation. This view has many adherents, who believe that the same process converts the mucous membrane into epidermis; and, recently, it is claimed that analogous changes are found in simple ozæna, the ciliated mucous membrane of the nasal cavity being changed into epidermis. Another manner of explaining the change of mucous membrane into epidermis has been advocated by Wendt, Habesmann and Bezold. It is claimed that when large perforations exist, and especially when the drumhead becomes adherent at the edges of the perforation with the inner wall of the middle ear, that the epidermis of the drum-membrane "gains ascendancy over the mucous membrane and extends

with much greater rapidity over the entire district." Bezold goes further, and claims that a simple tubal catarrh is frequently a cause of retraction and perforation of Shrapnell's membrane; that the edges of the perforation adhere to the walls of the space within; that extension of the epidermis over the walls of these spaces will follow; the cavity be filled by desquamation, and the nucleus of a cholesteatoma formed. Thus Bezold explains the fact that the upper part of the middle ear is often the seat of cholesteatoma, and that cholesteatomatous matter was found in all his cases of chronic suppuration with perforation of Shrapnell's membrane.

In conclusion: If we bear in mind that cases of cholesteatoma have been reported without any history of previous inflammation, while, on the other hand, it is certain that many owe their origin to inflammatory affections of the middle ear, we will hesitate to accept any one explanation as the only one. As is frequently the case in other matters, so here it is probable that the various theories do not conflict, but each serves as the true explanation for different cases; or, as Kuhn puts it: "Cholesteatoma of the temporal bone is either a true heteroplastic tumor, as Virchow believes it to be in all cases, or it may also develop, and in perhaps many cases, in the course of chronic suppuration of the middle ear from epidermis which has grown into the tympanic space from the perforated drum or the external auditory canal, and which has slowly and continually kept shedding its horny layer and thus forming the stratified cholesteatomatous mass."

DR. HIRAM WOODS, JR., said there was very little written about this subject in any of the books published in the English language. Of all the books to which he has access, Roosa is the only one in this country who makes mention of it under the name of cholesteatoma. Another name which has been given to these tumors suggests a possible origin of them in some cases. They have been called adipoceriform tumors. They usually occur in cases of chronic suppuration of the ear, and in that particular variety where drainage is exceedingly difficult, as in the perforation in Shrapnell's membrane. It is a well known fact that where inflammatory products cannot be removed on account of difficulty of drainage, poor vascular supply, or other causes, these products gradually undergo fatty degeneration, and caseation may take place in them. Cholesterine is one of the characteristics of the process of

caseation, according to Green, and it would seem that the ordinary degeneration of pent-up inflammatory products might account for at least a certain class of these cases. They cannot all be accounted for on any one theory.

DR. W. H. WELCH agreed with Dr. Friedenwald in believing that there are various causes. It is not an anomalous occurrence to have cylindrical epithelium transformed into flat epithelium, as takes place in some of these cases in the ear. We have analogous changes in mucous membranes in other parts of the body. Virchow has described a condition of pachydermia laryngis, in which the epithelium of the larynx becomes transformed into laminated flat epithelium. Another illustration is in prolapsus of the rectum, in which cylindrical epithelium becomes transformed into epidermis. The same is true of the mucous membrane of the prolapsed uterus. Virchow has also described the transformation of ordinary epithelium into ciliated epithelium. There is sometimes found on the peritoneum ciliated epithelium, where we should have ordinary epithelium. There is nothing unique or particularly unusual in the mere transformation of the epithelium of the tympanic membrane into epidermis. Other cases present too much of the character of destructive tumors to suppose this to be the only explanation. Many of these are doubtless real tumors, which probably rest upon an abnormality of embryonic development; epiblastic structures become displaced and grow where they ought not to be. One severe case of pearl tumor seen by Dr. Welch was reported by Dr. Coring.

DR. FRIEDENWALD, replying to Dr. Woods, said that such processes of degeneration and disintegration of the products of inflammation are very common in all sorts of chronic inflammation of the middle ear; but the products of such disintegration are quite different from products found in the cases described. There we have broken-down pus-cells and disintegrated matter, but no flattened epithelium.

DR. WELCH was asked by Dr. Friedenwald if, in cases of prolapsed rectum, the epithelium is changed into real epidermis, with a rete malpighii formed and flat cells losing their nuclei, as on the skin, and replied that he had examined several such cases, and in them there is hardly a rete formed, but we have from below upwards the cells gradually becoming flat, the topmost layer composed of real horny cells, as in the skin.

Melange.

Death as the Result of Violating the Code of Ethics.—A gentleman of New Orleans, responding to the invitation of a medical student to witness an operation at a clinic, was suddenly stricken with paralysis on taking his seat in the amphitheatre, and died shortly afterward.

Medical Men and Public Exhibitions.—The *Provincial Medical Journal* states editorially that when a medical man attends the exhibitions of a thought-reader, a mesmerist, or a conjurer he is quite within his right in going upon the platform, and if necessary making a fool of himself. He has paid for his admission, and as one of the auditors he is entitled to get as much value as he can for his money. He does not in any way represent medicine when he goes on the platform. Some thought-readers and some conjurers have made use of the certificates they have received from medical men, and very foolish certificates some of them have been. Maskelyne and Cook can perform tricks which puzzle not only medical men, but experts in the same line of business. We have not yet heard that a medical committee have been appointed to explain Messrs. Maskelyne and Cook's feats, though there is just as much reason for a committee for Maskelyne and Cook's as for some of the exhibitions with which medical men have been associated.

Collapse of Another Cancer Cure.—A few months ago, says the *Medical Record*, Professor Adamkiewicz announced that by means of some experiments he had been able to arrive at a certain method for curing cancer. The excitement which this announcement made in Vienna was such that the Minister of Education was induced to invite the professor to come to the Austrian metropolis for the purpose of testing his new treatment in one of the state hospitals. In a ward under the charge of Professor Bilioth, Adamkiewicz was permitted to experiment upon a patient who was believed to be affected with epithelioma of the upper and lower lids of the right eye. The history showed that the disease was rapidly spreading,

and, under the circumstances, therefore, the case seemed a most suitable one for testing the value of the new treatment. On October 25, the professor took the patient in hand, the result being that on November 12 the sufferer was discharged from the hospital—cured. In other words, after eighteen days' treatment an epithelioma of the upper and lower lids was pronounced by Adamkiewicz to have perfectly cicatrized over. Professor Billroth examined the case and asserts that the patient was not cured. Professor Albert adds that other experiments of Adamkiewicz in his wards were unsuccessful.

A Maternal Impression that takes the Prize.—Under this title the *Medical Record* publishes the following from a correspondent: Occasionally the past twenty years your journal has contained articles relating to maternal impressions. There seems to be times that physicians like to write on a particular subject, reminding one of a Methodist class-meeting, where every one is invited to free his mind.

That children are born with certain marks referable to some occult cause I do not doubt, for one must believe the evidences of his own senses, even if he can not explain the phenomena from a scientific standpoint.

The particular incident I have in mind now occurred twenty years ago, and I relate it only because of its ludicrous nature. When Mrs. S——, who lived in one of the towns of the State, was about three months pregnant she had occasion to go to the water-closet in her yard. The closet was so situated that any one who chose could enter. As it happened when she opened the door a man arose from the seat. Mrs. S—— obtained a full view of the man's genital organs and retired.

In course of time her child was born, and on its abdomen was pictured in bold relief the external reproductive organs of a male. That child is a man to-day, and carries the impressions of the organs mentioned indelibly stamped upon his abdomen through some mysterious agency of nature.

Hints to Medical Writers.—The following hints (*Medical News*) are very appropriate and should be followed by medical writers: In the first place, if possible, all authors should verify any reference that they wish to quote. As is very well known, a great many writers do not take the trouble to do

this. The author frequently had shown to him by the more careful authors, errors in references that they wish to quote, that have been used over and over again by numerous writers, running back for many years; in one case the original was over two hundred years old, and had been quoted perhaps fifty times, and yet it was quite evident that not one had cared to take the time to seek the original. Surely what an author thinks of sufficient value to incorporate in his work should be worth both the time and trouble to verify.

In the second place, he would call attention to the desirability, in making a reference from a book or monograph, of giving the name of the author, with his initials, place of publication, date, volume—if more than one—and page. For instance: "Bell, B., Syst. of Surgery, Edin. 1891, Vol. III, p. 16;" not, as is the custom of many writers, "Bell's Surgery, Vol. III, p. 16." When making a reference to a journal, the writer should give an accurate copy of the title—date, volume and page. The custom of using the editor's name in quoting a journal is very objectionable.

Music and Medicine.—According to the *Physician and Surgeon* music may form an important branch of future therapeutics. Nervous diseases will probably first reap the benefit. The soothing effect of music on the listener is a universal quality, and even the chop-stick melodies of the Australian aborigines have in them an element of vague impressiveness. There are, of course, individual exceptions to this universal rule, and some, doubtless, who believe with Theophile Gautier, that "music is the most expensive of all noises." Among the musical allusions of Shakespeare, will be remembered that in the "Merchant of Venice," where Shylock speaks somewhat strangely of those who "when the bagpipe sings i' the nose, can not contain their urine." If the bagpipe be really a cause of enuresis, it might perhaps be utilized as a sort of psychical diuretic. The popularity of the tarantella in days past, as a remedy for bites of the tarantula must surely have had some good reason in actual experience, which would justify its revival. There seems to be little doubt that the lyric opera is good for dyspepsia, and in large cities, where this malady is prevalent, it is the popular post-prandial diversion. A melody in strings is accounted a graceful remedy for insomnia; and is usually employed for the purposes of the

serenade. Some maestro of the future may perhaps benefit the afflicted by writing a concerto, containing a fine staccato passage warranted to relieve constipation, and the irregulars will doubtless besmear the walls with pleasing alliterations, inviting the credulous to purchase "Signor Cattalini's Celebrated Catarrh Cantata."

Sketch of History of Medicine.—In a short paper on this subject in the *Maryland Med. Jour.*, Dr. Guthrie Evans says: In 1315, Mondinus, a professor at Bologna, dissected two female subjects and published a description of his work. For three hundred years this book was used as a text-book in Italian schools.

In 1543, Vesalius, a professor of anatomy at Padua, published his great work on anatomy.

The first complete work on Surgery, by Guy de Chauliac, was published in 1363. Previous to this time surgical operations were generally performed by barber-surgeons, owing to the fact that most of the learned physicians were priests whom a canon in the church forbade to shed blood. Surgery, however, received its greatest impulse from Ambrose Paré who, in 1536, abolished the practice, then prevalent, of pouring boiling oil into gun-shot wounds.

In the 15th century we first hear of a number of new diseases, such as scurvy, whooping cough, syphilis, etc., and much of this may be attributed to Paracelsus, who openly attacked the opinions of Galen and Avicenna. The anatomists of the 16th century had paved the way to the discovery of the circulation of the blood; such men as Cæsalpinus and Servetus having had considerable knowledge on points such as the lesser circulation through the lungs, the cardiac valves, aorta, etc., but it remained for William Harvey, an English physician, to take the last step. After having taught the circulation for ten years in lectures, he, in 1628, published his theory to the world in a work entitled, "*Exercitatio anatomica de motu cordis et sanguinis in animalibus.*" Harvey was born in Folkestone, April, 1578, and died in London, June, 1657. He received his degree of A. B. at Cambridge and in 1602 was graduated as Doctor of Medicine at the University of Padua. He expresses himself as indebted to his preceptor, Fabricius, for his discovery, but, beyond the discovery of the valves of

the veins by Fabricius, the merit undoubtedly belongs to Harvey. He also received the degree of M. D. from Merton College, Oxford, of which institution he was warden. In 1652 his statue was placed in the college hall of the College of Physicians. I have omitted to mention many whose works have had considerable influence upon the advancement of medical science, such as Trotula, Gariopontus and Copho, of the 9th century; Gorviani, Gunther, Linacre, Brissot and others, of the 15th; Lancisi, of the 18th, and others; but I hope a sufficient number have been mentioned to give the student a slight knowledge of this too much neglected subject.

A Dangerous Maternal Impression.—A correspondent of the *Medical Record* writes as follows: It is a strange thing how the subject of "Maternal Impression" seems to have taken hold of medical literature. Wherever one looks he finds an article on "Maternal Impression." Will you allow me to communicate a case which has fallen under my own observation. You will find it a rather singular one, and difficult of belief, but I vouch solemnly for the truth of it. There is a little place in the State of Missouri, which as my story is true, I will not call by its own name, but by that of Abdera. Thither came, some years ago, a young physician, good-looking, of fine address, *l'oreille rouge et le teint fleuri*. He was soon a favorite and an oracle in some of the best families. In due time it happened that a number of children all over the city were found to be strikingly like in feature to this young Æsculapius. You can easily fancy the talk which arose; even the benevolent in secret shook their heads and meditated. But soon unexpected light was thrown upon the matter. There came a private lecturer—a lady—who explained to her feminine audience—she lectured only to ladies—that oftentimes even the careful and modest ministrations of a much-esteemed physician produce on the maternal mind an impression materially transmitted to the unborn offspring. This solution was adopted, and great relief was experienced in consequence.

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Original Contributions.

THE MEDICAL TREATMENT OF APPENDICITIS, WITH A REPORT OF FIVE CASES ENDING IN RECOVERY.* By A. B. KIRKPATRICK, M. D., Philadelphia.

The diagnosis, symptomatology, and pathology of diseases in the region of the cœcum have been so recently and ably given by Drs. Price and Morton, members of the Society, that it would be useless for me to go over the ground again and attempt to add anything new on the subject. Surgery has made such marvellous advancement and accomplished such brilliant results in the last decade, that the medical treatment of certain diseases appears, at least for the time being, to be eclipsed. I am led to believe, from my limited experience, that some of our younger surgeons are too ready to perform abdominal section before they have exhausted the medical armamentarium, which, though perhaps somewhat slower, *may* be surer and subject the patient to less risk.

I think the surgeon in consultation with the physician will be able to determine and select the cases for operation, if they are so fortunate as to see them in their incipency, but in many of these cases the physician is called in late, and the surgeon later—too late in some cases.

We are all more or less infatuated with the wonderful results of present surgery, because, I think, it is something tangible. We make our diagnosis of appendicitis, upon the abdomen, and remove the diseased organ. There is the ocu-

*Read Before the Philadelphia Medical Society.

lar proof of our skill in diagnosis and operation. In medical treatment our evidence, if we can produce any, is not so conclusive. It is of a more circumstantial character.

No one of the same experience feels more deeply than I do, the debt of gratitude we owe to aggressive surgeons, and no one, I think, takes the knife with more satisfaction, but I must always be *certain* that it is the *only* or safest method for the patient.

In the five cases which I wish to report, I demonstrated within twenty-four hours—in four of them at least—that an operation was not necessary, and all the five recovered without section. You may infer that they were all mild or benign. Three of them were, because seen early and treated vigorously.

Perhaps the title of my paper is not broad enough to cover it, but I wish to include in the medical treatment of typhlitis everything short of surgical operations, for I rely as much, or more, on mechanical measures as on internal medication. I wish to report what I consider as the most critical case first, though it was my third in regard to date. The first case dates from March, 1889.

In four of the cases other physicians had been in attendance, or saw the patient with me in consultation. Two of the cases came to my notice late in the disease, and to make the history complete, I shall be obliged to read part of several letters which were kindly written to me by the physicians who first had the cases in charge.

For the previous history of the first case, I am indebted to the kindness of Dr. Edwin B. Wheeler, who wrote me the following letter two months after treating the case :

"Was called to see Master A., thirteen years old, Thursday, April 2, 1890. He had been constipated a day or two, evidence conflicting as to the condition of the bowels previous to that time. There had been no diarrhoea, however. I first thought it a case of typhoid fever, as the father had just recovered from that disease. I ordered a powder of calomel, but no action. Then gave one bottle of citrate of magnesia in half-bottle doses, with no result. The pain and tenderness in inguinal region increasing. Some tympanites. Gave injection of tepid, soapy water with a few drops of turpentine without any result. On Friday I gave drachm doses of Rochelle salts in one-third of a glass of water every hour for four doses, and tincture of hyoscyamus. There was no result so far as any action of the bowels was concerned. The vomiting was increasing, and the tenderness covering a larger area. During this

time it had become apparent that we had to deal with an obstructed bowel due either to intussusception, typhlitis, or perityphlitis.

"Injections on Saturday morning were not retained. Passed up a catheter, but still injection was not retained. Gave morphine in small doses. Saturday, P. M., Dr. J. H. Dripps saw the case with me. We agreed as to the case, but were both on the fence as to the advisability of section. We then called in Dr. Noble, of the Kensington Hospital, Saturday, 6 P. M. After talking over the case we concluded that the boy's best chance was to have the belly opened and the obstruction removed. We ordered a room cleaned and agreed to see the case the next day.

"At 9 A. M., Sunday, April 6, we (Drs. Dripps, Noble, and myself) met and concluded that the boy's chance would be slight if we operated in such unsanitary quarters, with such nursing as the father and mother could give. The parents agreeing, we wrote to the Pennsylvania Hospital, asking them to take the case, the father to let me know the result of his errand. We separated with the understanding that if the hospital refused to admit him, we would operate, Dr. Noble saying he would hold himself in readiness until 2 P. M.

"About 11 A. M. the father informed me that the hospital authorities would send for the case as soon as I desired. I sent him back to the hospital with word to send for the case immediately. Somewhere about 3 P. M. the father informed me that he had been down-town, but did not go to the hospital. He had stopped to see the boy's aunt, who said he should not go to the hospital. Whereupon I dismissed the case, refusing to have anything further to do with it. The case has certainly resulted very fortunately in your hands, and I am truly pleased, etc."

I will not go fully into the diagnosis of this case, for I was perfectly satisfied when I learned from the father, who had consulted in the case.

I was called in to the case at 10 P. M., Sunday, April 6. The symptoms all indicated complete obstruction of the bowel, and collapse. He had vomited first on Wednesday. The temperature was $96\frac{1}{2}^{\circ}$; pulse indistinct at wrist; heart was 140 per minute, and he was in a cold perspiration; respiration 40. Abdomen exceedingly tympanic, and bladder much distended. There was stercoraceous vomiting, and nothing had been kept on the stomach for days. I at once gave a hypodermic of morphine, atropine, and strychnine, and then emptied the bladder by a catheter, and about sixteen ounces of water passed. The patient was apparently moribund, but revived somewhat after the hypodermic injection, and though I feared he would die while giving it, but I knew there was nothing to lose, and thought there might be a slight chance for life if the obstruction could be removed, so I had him supported in the knee-

chest position, and injected a pint of warm liquid containing castor oil, turpentine, whisky, and Epsom salts. This was about 11 P. M.

This was kept in the bowel for half an hour by a compress, held in position by the hand, then he was allowed to lie down on the right side. Within an hour there was a copious evacuation of liquid with scybalous masses. The injection was repeated at 12 o'clock, and another free movement resulted. These greatly relieved the tympany and pain. We then began to give turpentine and whisky by the mouth once in two hours, and also a drachm of Epsom salts in hot water in two hours alternately. Only the first dose of salts was rejected. The whisky and turpentine were retained. These were regularly administered through the night. I left the patient at 1 A. M. asleep, and he had become much more comfortable.

On returning in the morning, I found there had been several more movements, and the bladder had been emptied naturally. The tumor over the right iliac fossa had nearly disappeared, and the pain and tenderness were much less. The temperature was normal. The tongue and sordes on teeth indicated typhoid fever. There were five movements of the bowels within twenty-four hours after the enema, and not less than three to six any day after for two weeks. The temperature gradually rose to 102°, and the evening temperature was about that for a week, when it gradually declined, but did not become normal till the 29th, or three weeks from the time I first saw the case. The stool had quite the appearance of typhoid, as did the tongue, and there was a suspicious eruption on the chest and abdomen. After the obstruction was removed the case was treated as a simple case of typhoid fever. He had two grains of quinine and one-thirtieth of a grain of strychnine three times a day, with nitro-muriatic acid, pepsin, and bismuth every four hours, and paregoric when needed to control the bowels, and a liquid diet throughout.

At noon, the fourteenth day after I saw him, after some pain and flatus, he passed a slough from the bowel, which in the recent state was elliptical and two and a half inches the long diameter. There seemed to be some pain and tendency to collapse, so he got another hypodermic and free stimulation. There was also a rise of 2° in temperature. He rallied the next day, and made a rapid and complete recovery.

On May 6, which was just a month from the time I first saw him, he sat up and took solid food.

He is a strong, healthy boy, and now drives for me.

I watched the case very closely throughout and feel certain that the intussusception, or typhlitis, or perityphlitis, was followed by a clear case of typhoid fever. I am by no means so clear in regard to the pathological condition in the region

of the cœcum and shall greatly appreciate the views of the members of the society on that point.

The second case, Mr. M. K., who is a prominent and very active literary man in this city, dates from March 24, 1888.

The patient gave me a very intelligent history of his case, which was that there had been a gradual decrease in the evacuations for several weeks, with a great deal of distention and discomfort of abdomen, and finally obstinate constipation followed. When I first saw him there had been no movement for several days.

He had a tumor and localized pain in the right iliac fossa. Temperature $103\frac{1}{2}^{\circ}$. Pulse 120. Coated tongue, etc.

He was given a hypodermic of morphine and atropine for the pain, which gradually spread over the abdomen as the gas accumulated. Two large doses of castor oil and turpentine were taken without any action. He took calomel, soda and ipecac powders for twelve hours, followed by Hunyadi water, but still there was no movement of the bowels. We then resorted to the enemata of turpentine, laudanum and castor oil, Epsom salts, and hot water, given in the knee-chest position. These moved the bowels freely and relieved the pain and distention. Turpentine stupes were also used freely.

There was a double inguinal hernia in this case and to satisfy ourselves that there was no strangulation of the gut Dr. W. W. Keen was called in consultation, and pronounced the case free from any such complication and confirmed the diagnosis of appendicitis. He suggested pills of colocynth comp. and opium.

The patient made a good recovery and for several weeks took pills of aloin, strychnine, belladonna, cascara, and physostigma to relieve the atonic condition of the bowel, and an occasional dose of Hunyadi as he was rather stout and full-blooded.

In July, or four months later, this same patient had a recurrence of the trouble while at the seashore, which began, possibly, with a slight tendency to constipation early, but the first the patient complained of was a severe serous diarrhoea with high temperature -104° . Pulse 128 (normal 58). Severe pain in the ileo-cœcal region. This attack began before I took up my summer practice at Cape May Point and Dr. F. E. Stewart, of Wilmington, was called in.

He made the diagnosis of colliquative diarrhoea, and gave acetate of copper and morphine to check it, and aconite for the fever, but nothing seemed to have any permanent control over the bowels.

Right here in this case, which was my first patient, but his second attack of appendicitis, I learned a very valuable lesson. Here was an obstructed bowel, and nature was trying, by pouring out a very excessive liquid secretion, to flush out the obstruction or foreign matter.

I simply took the cue from nature, and with small, fre-

quently repeated doses of calomel, ipecac, and soda, followed by salines, accomplished the object, and in less than six hours had the satisfaction of seeing the tumor, which had been in the region of the cœcum, deposited in a commode, which the black, very offensive mass nearly filled. In this attack we used hypodermic injections of morphine for pain, and pilocarpine for the high fever and dry skin and tendency to cerebral congestion, as the kidneys were not acting at all freely. There was no vomiting after the first hypodermic, and the patient began at once to take iced champagne and Apollinaris, and soon was able to take milk and other liquid food.

In this case no resort was had to rectal enemata, as the bowels were thoroughly cleared out within six hours after the time I first saw the patient, and in three or four days he was attending to his regular business. He took the aperient, tonic pills for several months, and was requested to use Hunyadi water freely, and rectal injections, if the symptoms occurred again. He has had no recurrent attacks and no constipation since.

The fourth case, Miss S., occurred at Cape May Point, and was first seen and treated by Dr. F. E. Stewart, Wednesday, August 24, 1891. I wished to speak of this case at the special meeting, September 28, when Dr. Morton read his interesting paper on "The Surgical Treatment of Appendicitis," and wired Dr. Stewart for his diagnosis, and he sent me the following telegram: "Case was obscure. Called Dr. David Stewart in consultation. He said 'appendicitis.'" I am indebted to Dr. F. E. Stewart for kindly furnishing me the history of this case, which I quote from his letter:

In this case of Miss S., there were pain and tenderness over the abdomen, which, as the case developed, became marked in or over the right iliac fossa. Instead of dorsal decubitus, the patient sat in a chair with her thighs flexed on the abdomen, and could not lie down until relieved by treatment. There was fever; temperature 102°. There was constipation, nausea, and if I remember correctly, some vomiting, but the latter was not a marked symptom of the case. I did not discover a tumor on abdominal palpation or vaginal touch, but Dr. David Stewart, who saw the case with me on the second day, called my attention to what appeared to be a doughy mass on the right side of the body on examination *per rectum*. I must confess that I would not have discovered said mass except my attention had been called particularly to it, or, in other words, I might have had a suspicion of its existence, but it required a

finger of more education than mine in feeling for tumors of this nature to make a positive diagnosis.

The treatment suggested consisted of hot turpentine stupes, opium and iodide of mercury; under this she seemed to improve.

From the beginning I recognized the gravity of the case. I advised her to go to the city at once, as proper nursing was out of the question, situated as she was at the Point. Furthermore, I told her if she got worse an operation might become necessary, and then it would be too late to remove her."

I first saw the case Monday, August 31, at 6:30 P. M., and found her extremely weak and nervous from the trip from Cape May Point. The temperature was $103\frac{1}{2}^{\circ}$, pulse 120, abdomen tense, tympanitic, and extremely sensitive. I found a large tumor in the region of the ileo-caecal valve, intense pain and nausea. There was extreme tenderness over the tumor and abdomen generally, indicating a good deal of general peritonitis.

Miss S. was brought to the city by her sister-in-law, and they went into a house where the furniture had just been piled in. There was not even a bed up or any convenience for heating water, so in regard to nursing and environment she did not improve her condition. When I arrived she was on a bed that had been hastily put up.

The sister-in-law, who acted as nurse, got hot water for stupe and enema, and the patient had the same treatment, practically, as the boy—the first case reported—except that I entrusted the giving of enemata to the nurse, who proved very intelligent and efficient.

When I called next morning I found the bowels had moved freely several times and, though the patient had had a restless night, she had slept some. The pain and distention were nearly gone and the temperature had fallen to 101° . By Wednesday, September 2, the temperature was normal, and the pain was entirely gone. She began sitting up Thursday, without my knowledge, and the next Wednesday she went back to the Point. I believe she had a slight recurrence of the pain, inflammation, and constipation the week after she got home, but they were controlled by injections, stupes and opium suppositories.

She has enjoyed good health since.

The other two cases of typhlitis, which occurred in my practice within the last year, were quite similar in regard to symptoms and treatment to the others that I have reported in detail, and as I relied only on myself for the diagnosis and treatment, I will not weary you with a repetition of them. I have not aimed to give the latest and most approved treatment from the text-books of the day, but what seemed to me to be indicated and necessary in the emergencies of these cases, when I dared not waste a moment in temporizing or experi-

menting. It appears to me a serious loss of time to depend solely on external applications to the abdomen and protiodide of mercury with belladonna and opium internally, when we have to deal with a bowel obstructed by hardened accumulation of fæces. I believe most cases of obstruction of the bowel if not due to intussusception or strangulated hernia, are due to the absence of the natural secretion caused by the localized typhlitis, which, if not soon relieved, becomes a perityphlitis, and then more or less general peritonitis must result. The rational method seems to me to be: First. To relieve the pain by hypodermic injections. Second. To remove the cause or obstruction by causing, if necessary, pathological or excessive secretion, by giving some saline, which I believe is the best antiphlogistic for the inflamed bowel. Third. To soften the hardened fæcal accumulation from below with enemata, solution of Epsom salts in water as hot as can be comfortably borne, to which I add turpentine and oil. The knee-chest position, with copious enema, favors the distention of the colon up to the seat of the disease.

I have found by experience that the enema to be effective must be given in this position, and that it must remain in the bowel for some time, and in several of my cases it was necessary to repeat the operation three or four times. This plan of treatment has been successful in six cases, which are all that I have treated; but I fully realize that it may fail in the seventh.

I think it is truly in meetings like this that surgeons are broadened medically and physicians surgically—if I may be allowed the phrase. Doctors are only human, as we hear it said to ministers, and as such they are prone to do what they prefer, whether it be surgical or medical, and naturally they do best what they like to do and do oftenest.

SOME MOOTED POINTS CONCERNING THE VOMITING OF PREGNANCY. By T. RIDGWAY BARKER, M. D., Demonstrator of Obstetrics in the Medico-Chirurgical College, Phila.; Out-door Obstetrician to the Penn Dispensary.

In discussing the etiology, symptomatology, and prognosis of the digestive disturbance associated with gestation known as morning sickness, or the vomiting of pregnancy, it becomes necessary at the very outset of a comprehensive study of the

subject to exclude those forms of gastric trouble which, while often accompanying this purely physiological process, are nevertheless not dependent upon it for their existence, but on some preëxisting morbid condition which is simply aggravated by the changes incident to gestation.

From a failure to appreciate and differentiate between these forms of gastric disturbance is largely due the confusion and misconception which is so general, hence the existence of such a multitude of views as to the cause and gravity of the vomiting of pregnancy.

It becomes necessary, therefore, that we state clearly that when we speak of morning sickness we do not include the so-called vomiting *in* pregnancy, but confine our remarks solely to the vomiting of pregnancy. Without further explanatory remarks, let us proceed to a consideration of the subject from a scientific standpoint, ever mindful, however, how easy it is to advance a theory and how difficult to find evidence to support it. That the occurrence of vomiting without apparent cause in females who have exposed themselves to the risk of conception is a sign of much importance is generally admitted since it so quickly follows cessation of menstruation and, therefore, further tends to confirm the presumptive evidence of pregnancy. With reference to its etiology, one finds as many views as there are stars in the sky, each differing from the other in magnitude and brilliancy even as these different orbs of light. Let us then turn away from such a merry-go-round of medical opinion and seek to discover the truth in the realms of anatomy and physiology rather than in the domain of idle speculation.

Coincident with conception, we find a general rise in the intra-pelvic blood pressure resulting in increased activity on the part of all the viscera therein contained which are concerned in the process of reproduction. Cells heretofore carrying on a passive existence now spring into a high state of activity. Likewise there occurs hyperplasia and hypertrophy of tissue which is especially rapid in the uterine muscular elements. Nerves, which in the unimpregnated condition possess but a low grade of sensibility, now become highly sensitive and transmit readily to their respective centres slight disturbances which under other circumstances would fail to throw them into a state of activity. What relation, one

may very properly ask, exists between the vomiting of pregnancy and this exaltation of the nervous system? A casual one, most assuredly!

Can one fail to realize that this is a symptom of pregnancy due to the change in the nervous equilibrium induced by the process of gestation? Surely not. Rather are the nausea and vomiting expressions of a reflex irritation having its origin at the end organs of the uterine nerves which, as we have seen, are in a hyperæsthetic state. As the growing ovum demands, day by day, an increased space for its development, these end-organs are subjected to a varying degree of irritation which is transmitted to the centres and thence reflected out along the nerve-filaments distributed to the stomach. Why this affection is of more frequent occurrence and of greater severity in the first than in the subsequent pregnancies one can readily understand by comparing the cavities of the primiparous and multiparous organs.

We find in the former that the uterine muscular walls are convex and nearly, if not quite, in apposition, hence the capacity of the organ in these females is relatively less. Not so the multiparous uterus, for its walls are concave and the capacity is further increased in length by one-half of an inch owing to incomplete involution on the part of Nature after the first pregnancy. Need we seek for more conclusive evidence than this to support our position? Is it not plain to be seen that the resistance in the primiparous organ will be greater and the nervous disturbance more pronounced than where the cavity is larger, thus allowing the ovum to undergo its development without interference? Further, the period when nausea and vomiting are most apt to occur is in the second month, at a time when the growth of the uterus is principally lateral and the villi of the chorion are thrusting themselves into the serotine or placental decidua. As to the character of its onset, it is usually gradual, and disappears in a similar manner as the uterus rises out of the true pelvic cavity, thus having quite ceased by the end of the fourth month.

Concerning the symptomatology of this affection, it has not a few well-defined characteristics. The primary nausea and oppression experienced over the epigastrium soon gives place to vomiting, not, however, preceded or accompanied by any degree of nervous depression as is the case with emesis under

all other circumstances. The food, if any is present in the stomach, is expelled, not violently nor with any amount of retching, but almost as if it was regurgitated. Should the stomach be empty, then simply a little clear, normal gastric mucus is raised, which, as it usually occurs early in the morning, has given rise to the popular appellation of morning sickness. Further, if the matter vomited be food, it will not be found on examination to be sour or to have undergone decomposition, but in a more or less perfectly digested state, depending upon the length of time since its ingestion. As to the subsequent amount of nervous depression, in most cases it is practically *nil*, even when the vomiting is frequent and of long duration. This fact is very noticeable in some cases; the pregnant female may have just finished a hearty meal—for impairment of the appetite is rather the exception than the rule—when almost immediately afterward she will be obliged to evacuate the stomach, only to turn to the piano and find consolation for her lost breakfast. Rarely does one meet with a case of vomiting of pregnancy where the female's health has materially suffered, and this is what one would reasonably expect from a study of the symtatology of the affection.

That this digestive disturbance is a purely sympathetic one is proven by the fact that by a strong effort of the will the female cannot infrequently ward off an attack.

Should she, for instance, have accepted an invitation out to dine during this period of gestation, she can control the nervous irritability by a firm determination not to betray her condition to the assembled guests. It has been repeatedly asked, How can a women suffer from morning sickness at one period of gestation and not at another? in other words, How is it that the attacks vary in severity in different pregnancies? Moreover, Why is it that one pregnant woman has morning sickness and another does not? Can this be explained on the hypothesis of reflex nervous irritability? Most assuredly!

The variability in the duration and severity of the affection is due to two factors: Greater or less irritation, and greater or less irritability. The question may here be asked: Is vomiting of pregnancy a physiological or a pathological process?

It has been stated that among women of a strong, robust

type, vomiting of pregnancy is exceptional rather than the rule, as is the case in Europe and America. But this fact has no direct bearing on the case; it goes without saying, that the stronger and less sensitive the nervous system the less general and severe will be the sympathetic disturbance. One certainly is not warranted in stating that the vomiting of pregnancy is a pathological process, for it is due to a purely physiological cause. There exists no morbid alteration in structure or function of the nerves. The irritability is not pathological but physiological, depending upon the degree of sensibility of the nervous apparatus. Yet it has been claimed by some investigators that this very exaltation is evidence of some pathological lesion. Surely not. It were, it seems to me, as reasonable to declare a person's brain diseased because he is irritated by Wagner's music, in which he finds no harmony, as to declare that the sympathetic disturbance excited by pregnancy is due to some morbid process.

Again, if we select two galvanometers, one registering the weakest electric current, the other equally well constructed but less sensitive, we cannot say that the former is any more perfect than the latter; they differ simply in the degree of their sensibility. Difference in sensibility within certain prescribed limits is a physiological, not a pathological fact. While vomiting, as Austin Flint points out, is not, strictly speaking, a physiological process, yet under these circumstances it is far from pathological; rather let us say it is the pathological expression of a physiological process. The vomiting of pregnancy, unless complicated by some morbid process, never gives rise to alarming symptoms or threatens life. If prolonged beyond the period of quickening, its continuance may be accepted as positive evidence of some complication with a decided alteration in the character of the vomited matter will usually indicate.

Cases of pernicious vomiting call for diligent search for organic lesions in the nervous system or structural changes in some of the generative or associated organs. That the vomiting of pregnancy occurs in healthy, strong women almost as frequently as in their less robust sisters, though in a milder form and of shorter duration, only confirms the view as to its physiological nature. The view advanced, that the difficulties of parturition are proportionate to the severity and length

of the morning sickness, one is scarcely prepared to accept. The gravity of the digestive disturbance is to be estimated by the amount of nervous irritability, while the difficulties attending parturition may be classified under two heads: maternal and foetal. The former including uterine inertia, pelvic deformity, and rigidity of the soft parts; the latter, abnormal size of the foetus and malpositions of the foetus.

Surely no such conclusions are justified, for the reports from the large lying-in hospitals of both America and Europe unmistakably prove no such relation exists. Females who have suffered great annoyance from morning sickness have frequently as easy and sometimes more rapid labors than those who have almost wholly escaped this unpleasant early indication of pregnancy. Therefore, in conclusion, it would appear from a study of this affection: First. That the vomiting of pregnancy is due to a reflex irritation produced by the developing ovum acting upon an exalted nervous system. Second. That it is not an affection of great gravity and need occasion no anxiety or alarm. Third. That active treatment is rarely demanded, as it is only a disturbance of a few weeks at the most. Fourth. That the severity of the gastric trouble is no indication of the character of the subsequent labor. Fifth. That where the affection persists beyond the period of quickening, it is due to pathological causes which must be discovered and treated accordingly.

Clinical Reports.

CASE OF INVERSION OF A NON-PUERPERAL UTERUS. By JOHN B. ROBERTS, M. D., Professor of Surgery in the Woman's Medical College of Pennsylvania.

This case seems to me of interest because of the comparative rarity of the condition. I give it simply as a contribution for clinical discussion.

Mrs. H., aged forty-three, in November, 1890, complained of having had bearing-down pain for some months, and a slight vaginal discharge which had recently become offensive. Menstruation had been regular, and there was no great loss of blood at her usual periods. The woman had been married eight years; had had one miscarriage, but no children.

Vaginal examination revealed a reddish mass protruding from the uterus through a well-dilated os. As this was evidently a submucous fibroid tumor, a drachm of fluid extract of ergot was ordered to be taken three times a day, and douches of corrosive sublimate (1 : 4000) to be used twice daily. A little later the vaginal douche was changed to carbolic acid solution.

About ten days after I first saw her the patient was etherized, and a sloughing, friable mass removed with the fingers and forceps aided by a curette. The mass was about the size of a small orange. The patient recovered promptly and was discharged from treatment in about two weeks' time.

Three weeks later I was sent for to see the same woman, who was then greatly emaciated, exceedingly weak, and suffering intense pain in the abdomen, with the knees flexed upon the pelvis, and with an exceedingly fetid, profuse and sanguinolent discharge from the vagina.

Pressing my hand upon the abdomen I found the bladder greatly distended with urine, and upon investigation I found that she had not passed any water for several days. Catheterization relieved this condition, and examination by the vagina showed the existence of another sloughing fibroid tumor. This was readily removed with the forceps and fingers. The patient recovered promptly, though she was still weak when last seen.

About three months later she came to my office exceedingly pallid, with the statement that for some time she had been suffering from most profuse uterine hæmorrhages. Examination revealed protruding from the vulva a mass about the size of a small apple. Constant loss of blood was taking place, and the patient was so anæmic that she nearly fainted in my office, and had to be sent in a carriage to the Polyclinic Hospital. The vagina was packed, and the patient given full doses of quinine and whiskey. This was in March, 1891. After having been kept in bed for several days she was etherized, and a full examination of the uterine condition made. I found what I had previously suspected—a small growth attached to the fundus of the uterus which had caused inversion of that organ. The mass occupying the vaginal outlet and the vagina was, therefore, the uterus, which had been turned inside-out, with the attached polypoid, fibroid tumor

I readily tore loose from the mucous membrane of the inverted uterus what was found to be two small fibroid tumors, one about the size of a black walnut, and the other rather smaller.

An effort was then made to replace the inverted uterus by continuous pressure made with the finger introduced in the vagina. This was continued for a long time, but proved ineffectual. I considered at the time the propriety of removing the inverted uterus by performing partial or complete vaginal hysterectomy. It seemed to me, however, that it would be wise to make a further attempt at replacement before adopting radical measures. The patient was accordingly kept in bed nearly two weeks in order to build up her general health by stimulants and tonics, before making any further attempts at investigating the inverted uterine walls.

She was then again etherized, and a prolonged effort was made at replacement by means of the fingers and Aveling's repositor. The manipulation was kept up for an hour and a half, but was absolutely useless, although the pressure was made in a very continuous manner. The patient became so weak that I feared that she might die upon the table, and I therefore abstained from further manipulation, and again put her back to bed.

Two weeks later another effort was made to overcome the inversion of the womb. I was assisted on this occasion by Drs. Baldy, Baer, and Anna M. Fullerton, whose counsel and aid I felt that I greatly needed. The abdomen was opened by a median incision, when the coils of intestine occupying the pelvis were seen united by recent lymph, evidently due to the traumatism of the previous manipulations. An endeavor was made to correct the condition of the uterus by means of strong forceps introduced through the abdomen to dilate the uterine neck, while pressure from below was made with the fingers in the vagina. Although these manipulations were performed by such skillful operators as those I have mentioned, we were unable to make any marked impression upon the displaced organ. Unfortunately I had not provided myself with the most approved form of forceps. I then pushed through the fundus of the uterus a large needle carrying a strong piece of fishing-line to which was attached at the vaginal end a button of soft metal. I hoped that traction on this cord through the

abdominal wound would, by means of the button pressing upon the mucous membrane of the uterus, in the vagina, cause the uterus to assume its proper condition. While dilatation of the inverted fundus was made by means of the forceps, traction was made upon the string and pressure upward through the vagina. The muscular contraction of the uterine neck, however, prevented anything being gained by this manipulation, although the force applied was such as to finally cause the button to pull through the fundus of the uterus and to make its exit into the pelvis. After spending considerable time in these unsuccessful attempts, I finally did a partial vaginal hysterectomy, removing the inverted portion high up and stitching the edges of the uterine wall at the fundus together. This procedure was resorted to only after the patient had been under ether for three hours and was so overcome by shock that her condition was extreme. She did not react, her temperature not rising above 95° F., and she died within a few hours.

The abdominal wound was then opened, and a very small amount of blood found near the stump of the uterus. Evidences of non-septic traumatic peritonitis due to the previous manipulation were present, as has been stated in the account of the last operation.

In looking back upon this case I cannot but feel a sense of regret that the more radical operation of vaginal hysterectomy was not done at the time that the patient was subjected to operation for removal of the tumors causing the inversion. My desire to avoid an operation accompanied by shock and hæmorrhage at the time she had been so depressed by violent and repeated flooding, made me adopt what at the time seemed a less radical course. The extreme difficulty of dilating the uterine neck in cases of inversion was not appreciated by me until I found my attempts at replacement futile.

Dr. Leon Tripier, the well-known professor of surgery of Lyons, died recently at the age of forty-nine. He had already made a brilliant reputation for himself.

Prof. Palasciano, who taught surgery in Naples, died at the age of seventy-six.

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INNOVATIONS IN MEDICINE.

The closing decade of this century is one which has been already prolific in inventions and improvements, in general, and the number bids fair to increase in a geometrical ratio. Notwithstanding the assertions we continually hear that medicine is in the same state that Hippocrates left it, there is no doubt that it also has made and is yet making great strides in the march of improvement. Much of that which is daily spread out before us is good; and a great deal more, perhaps, is worthless. This is a rapid age and an age of rush. A natural consequence of this condition is that many things are made public before they have received mature consideration or have been placed to the test in a manner which would firmly establish this value or uselessness. Medicine has been enriched beyond her expectations and disappointment has been reached in a proportionate degree. Our therapeutic measures and surgical expedients have received numerous accretions some of which have proven priceless and others worthless. Pathology has received an impulse whose magnitude can not be measured, as its influences are too far reaching to enable anyone to determine what the possibilities of the future may develop.

The innovations which have been introduced in medicine are numerous and many have taken on the character of a "fad." They become fashionable for a time and then fall into a well-merited obscurity never to emerge again. The "fad" in medicine is of no more stable character than it is in fashion.

It has an evanescent existence and passes out of memory in a short time.

There are innovations of a different character which are destined to retain a permanent place. These have certain features about them which recommend them to the favorable consideration of all. And yet how are we introduced to their consideration. We have the remedy, the operation, the method, the instrument, or whatever it may be brought to our notice in a manner which immediately gives rise to suspicion. The remedy is a panacea for all the ills the human frame is heir to. The operation will relieve every case and lead to recovery. The method is applicable to everything and everyone. The instrument is the only one which should be used. Such are the sweeping declarations that are made. If you are not satisfied with this, you are flooded with testimonials written by persons you do not know, residing in places you never heard of. But Time, the great leveller, rights these things. The true worth and value of everything becomes established. The particular cases in which each one is indicated and proves of value become established and we finally come into possession of facts that are reliable, trustworthy and useful.

The older investigators have not taken kindly to innovations in medicine, nor have the older practitioners been very eager to adopt them. Long, patient investigation such as characterized the men of years ago, followed by guarded statements in regard to the conclusions derived, are still characteristics of some of our greatest and most thorough workers. We do not desire young men to suppress their ideas but we deprecate the practice of making sweeping conclusions, which, when sifted down, are found to have but a single case whereon to rest. The *a priori* method has been found to be the best in the long run, and the more closely it is adhered to, the more sound will be the deductions obtained. There are so many vitiating factors, so many accidental circumstances, so many unlooked for effects daily observed that they must all be taken into consideration as possible factors which are not at all uniform.

One great fault with all innovations as well as with their authors is that the only motive which seems to influence the latter is to announce something new whether it be useful or not.

EDITORIAL NOTES.

THE PAN-AMERICAN MEDICAL CONGRESS is doing good work as may be seen under our Society Proceedings. The JOURNAL has been appointed one of the official organs of this body and will keep its readers informed of everything of an official nature that transpires in connection with the Congress.

CHARITY-ABUSE is beginning to make its results felt and in a very practical way. The *Medical News*, like many of its contemporaries, sounded a warning note long ago. The public "Hospital Sunday" subscriptions to the London hospitals this year fell short of the amount given last year by the tremendous sum of \$330,000—a fact not to be explained by "hard times," etc., but indubitably explained by the sensible conclusion of sensible men, that there is quite enough real want in the world crying for relief, without encouragement of sham and lying on the part of those able to pay for medical attendance. Those that feel moved to pity by the diseases and suffering of the poor are very liable to have even that praiseworthy sentiment frozen by the thought that their charity is trebly prostituted: 1°. To relieve the undeserving that are capable of self-help; 2°, by just so much deducted from the due of the needy deserving; and, 3°, by the fact that the younger, struggling members of a noble profession are denied their proper *clientèle* by a vicious, unnecessary, and debauching system of encouraged pauperism.

Fast upon the mistaken teachings of many centuries is coming the widespread recognition of the very certain truth, that indiscriminate charity is always indiscriminate wrong. It is a progressive curse, doubling the evil it would halve. But organized and discriminate charity may be made as powerful an agent of good.

SUICIDE AND ITS CAUSES as well as the remedies therefor is discussed thus in the *Lancet*: It has been freely asserted, and we fear not without some foundation, that the frequency of suicide has markedly increased with our advance in civilization. It naturally follows that we should seek to inquire what are the ordinary causes and inducements which lead to acts of self-destruction, how far these have of late come into greater prominence, and how best they have been, or may be, met and resisted. We shall not be wrong in stating that in a

majority of instances weakness, physical or mental, or both, is the usual precursor of such acts. Among its various evidences, we may take mere despondency resulting from exhaustion in the struggle for existence to be on the whole certainly the least disgraceful. The failure of hope and of will are in this case indicative of mere nervous atrophy. The life seems already withered when it is plucked away by the hand of a man more insane than sinning. Passion and pique are other inducements which by no means belong to the same category. Here the flaw is moral, and directly and solely selfish. We have also to consider the case in which despair has been engendered by remorse, and the victim seeks death rather than face detection. In each instance, however, and in others which might be quoted, we can clearly trace a failure of vital force as expressed in character. It cannot be doubted that there are circumstances in our time as compared with previous periods which certainly do not diminish but rather increase the tendencies to such failure. The faculty of growth which has characterized our century above most epochs, whether as regards population, education, or trade, must have, and has, accentuated the friction of life. Hence arises the nerve waste already mentioned and apparent more or less in all classes. Literature, on the other hand, has not been blameless, but, as if taking its keynote from the age, utters in many works of modern fiction, not the voice of a strong and patient morality, but, instead, the mocking echo of a sceptical expediency. Doubtless this has helped to mould unevenly the vexed life of many to whom self-satisfaction is the one great gain and its loss the one absolute failure which they refuse to survive. Only in clearer views, and, if not with lessened work tension, at all events with firmer courage and faith in the providential and natural order in life's plan, can we look for that mental stability which is our best guarantee for its continuance.

An Epidemic of Tuberculosis.—An epidemic of tuberculosis has broken out in the electrical workshops at Paris. Out of thirty-five workmen thirty-two are consumptive. Twenty-three have become so since entering the workshop.

Microscopy.

Carpenter on the Microscope and Its Revelations.

—A new edition of this most valuable book has just been put upon the American market by P. Blakiston, Son & Co., of Philadelphia, and a copy of it now lies on our table. It constitutes a volume of 1100 pages, royal octavo, containing twenty-one full page plates and upwards of eight hundred engravings on wood, fully one half of which (it appears to us) are new, and all of them of the very highest class of work. Especially beautiful and new are the phototype plates of the diatomaceæ, the lithographs (engraved by Hellick and printed by the Cambridge, Eng., Scientific Instrument Co.) of the foramenifera and the chromolithographic plates of the desmids and algæ.

While the original work is so well known to students and users of the microscope as to need no description, the same cannot be said of the present edition, as the text of the latter has been so changed by its editor (Dr. Dallinger, President of the Royal Microscopical Society), and so much new matter has been introduced, as to make the present edition to a large extent a new work. As an instance of this we may cite the fact that the first five chapters of the last (sixth) edition, relating to the optical principles of microscopy, the mechanical construction of the various forms of instruments and accessories, etc., have been entirely rewritten and have been increased by two chapters of absolutely new work.

Dr. Dallinger has not been alone in the work, but has called to his aid the most renowned European specialists, Dr. Abbé, E. M. Nelson, Count Castracane, Dr. Van Heurck, Dr. Brady, Dr. Hudson, W. T. Suffolk, A. Cole, Dr. Hill, J. N. Langley, Frank Crisp, John Mayall, Professor Hicks, Dr. Sorby, Prof. A. W. Bennett, Prof. Jeffrey Bell, Prof. Hyland and many others, and the result of their work is an encyclopædia of microscopy in the truest sense of the words. The work embraces the latest results and ripest work of its founder and author, the late Dr. Carpenter, whose articles on

diffraction and kindred subjects were running in the *English Mechanic* at the time of his death.

Of the mechanical execution of the American edition of the work it is impossible to speak too highly. It is in everything in marked contrast with the last English edition, except as to the printing of the plates, all of which is English. In shape it is far preferable to the little, dumpy, small octavo (or large duodecimo) affected by our cousins across the water. The paper is heavy and of excellent quality, while the binding is most substantial, as befits a book which is to be so frequently handled and consulted. The index is very full and well arranged. The price of the work is \$6.00 and it can be procured of Jno. L. Boland in this city, or of the publishers, P. Blakiston, Son & Co., Philadelphia.

The Bioblasts or Fuchsinophile Plastidules of Altmann¹.—Richard Altmann, in his recently published work *Die Elementar-Organismen und ihre Beziehungen zu den Zellen* (Leipzig, 1890), in the exposition of his theory of bioblasts, declares himself opposed to the accepted theory of the homogeneity of protoplasm, which latter he considers as the result of an association of bioblasts, or elementary organisms, homologues of bacteria and which he defines "as a colony of bioblasts, whose individual elements are grouped together, whether after the fashion of zooglea or of the arthrospores, and fixed (or bound together) by some indifferent element."² The bioblast, or organized crystal, is the visible morphological unity of organic matter, and can live in a free condition (autoblast) or associated with other living matter (cytoblast). Autoblast and cytoblast alike can take the form of monoblasts or nematoblasts. Cytoblasts may be divided, accordingly as they belong to the nucleus or to the cellular body, into caryoblasts and somatoblasts. The phylogenetic derivation of the cell is as follows: An association of bioblasts produces a moner, from which by internal differentiation comes the metamoner (moner with the first rude sign or suggestion, so to speak, of a nucleus) or the cell. As to how the bioblast is pro-

1. By Luigi and Raffaele Zoja, being the substance of a memoir presented by them to the Lombard Institute des Sciences.

2. Eine Colonie von Bioblasten. deren einzelne Elementen, sei es nach Art der Zooglea, sei es nach Art der Gliederfaden gruppiert und durch eine indifferente Substanz verbunden sind.

duced, Altmann states that he is ignorant, and for the moment admits the aphorism "*omne granulum e granulo.*"³

The different phases of the production of fat in the hepatic cellules of the frog and the embryo chick, in the adipogenous organ of the new-born kitten, in the fat glands of many animals, and in the progress of the phenomena of secretion in the cellules of the fat glands, salivary glands, etc., studied by special methods devised by him, have led Altmann to admit that the processes of elaboration of cellules are due to bioblasts, just as other considerations have induced him to declare that the functions of the cellule should also be attributed to bioblasts.

Professor Maggi, as long ago as 1868, came to conclusions very similar to these, and since 1874 he has taught them openly in his courses of comparative anatomy, at the University of Pavia, and has published numerous works and investigations in this direction, of all of which, singularly enough, Altmann seems to be entirely ignorant. He seems also ignorant of the works of Cattaneo, Parona, and Pilo, in this same direction.³

According to Maggi the cell is an association of cytodetes, the cellular body, the nucleus and nucleole of which are differentiated according to their several functions. The monera may be the result of an association of plastides of an inferior degree, or plastidules. Thus the cellule is a cytodulary, and the cytode a plastidulary tissue. The plastidules are granulations of protoplasm (plasson, cytoplasma, carydioplasma, caryoplasma) and it is to these that we must attribute all the functions of the monera and the cell. Thus the plastidule plays the same role in the cell that the latter (the cell) plays in the organism of a metazoarian or of a metaphyte.

More elementary, or simpler still, according to Maggi, than the plastidule is the *glia* (bathybius, aphaneroglia of fresh water, etc.), which consists of autoplassion,—that is, a non-limited plastic substance, without dimension or form, or a not yet individualized being. Glia is the simplest form of life yet discovered and hence, logically is that first formed in biological evolution, and that which should take on life when—

3. See *Atti della Soc. It. di Sc. Nat., Milano*, 1878; *Bollettino Scientifico*, 1878-86; *Gazzetta Medica di Lombardia* etc. etc. More than thirty references are given, but it is needless to reproduce them here.—F. L. J.

ever non-organized organic substances find themselves in a condition favorable to organization. From glaire (glia), by individualization of certain parts, plastidules are formed.

Maggi further finds in plastidules that triple parallelism in the biological state presented by other plastids of organization, viz.: uncombined (free or independent) plastidules (micrococci, bacteria, etc); plastidules living in association (like those which constitute an intrinsic part in monera or in the cell); finally the virtual plastidule (as in the development of *pelomyxa*, *vitelline granulations*, etc.)

These ideas, so long professed and publicly taught by Maggi, have been confirmed in their principle features by the researches of Altmann, the morphological value of the "plastidule" of Maggi being the same as the "bioblasts" of Altmann.

Maggi takes as a point of departure the researches in plasmogony made by him in conjunction with Professors Balsamo Crivelli and Giovanni Cantoni⁴, and upon a long series of independent researches made by himself in glaires, bacteria, the lobates and ciliates. He then has taken into consideration, especially insisting upon this point in his course of lectures at the University, the constituent elements of the cellules of higher organizations, such for instance, as can be observed directly (pigmentary granulations, vitelline granulations of the egg, protoplasmic granulation, etc.)

Altmann has made special study of the higher animals. Regarding the pigmentary granulations of the pigment cells as living elements, naturally colored, he sought and found a method of putting in evidence the element of other cells and was thus able to prove in an objective manner the important part played by the bioblasts in the vital phenomena of the cell and, consequently, the vitality of the latter. Thanks to the technical processes devised by him, it is now possible to assemble and reunite the results of numerous observations, because we can now control our investigations with the greatest nicety, and can thus confirm the great importance of the bioblastic or plastidulic theory.

We shall henceforth retain the word plastidule, since it

4. These researches are cited in full in Maggi's contribution "*Sull' influenza della temperatura nello sviluppo dei microbi*" (The influence of temperature in the development of microbes,) *Boll. Sc. N., Pavia*, page 79-115.

was proposed by Maggi long before Altmann's name (bioblast) and because it is more convenient.⁵

Etymologically the word bioblast signifies "life generator," and it is of the same class as spermatoblast, neuroblast, myoblast, etc. It thus assumes a significance that we cannot accord it, at least until we satisfy ourselves that there is not a yet more elementary organism endowed with vital manifestations. The main reason for its rejection, however, is that it expresses an inexact scientific conception in which vital energy is disjoined from the idea of matter. The word plastidule, on the contrary, expressed the exact idea—a minute plastid, subordinate, in both Maggi's and Altmann's investigations, to the cell. The plastidule as thus understood does not correspond (as Altmann wishes to make it) to the plastidule of Haeckel,⁶ which is not a visible element but the physical molecule of living matter. For this molecule Maggi proposes the name of *Biomole* (*Bollet Sci. Pavia*, 1885.)

To designate the plastidules of the cellular body which are colored red by fuchsin we made use of the descriptive adjective "fuchsinophile." No ambiguity can arise from it as it is simply a descriptive name of the plastidule.

The researches which we are about to describe were carried out in Professor Maggi's laboratory of comparative anatomy and physiology, and we take this opportunity of rendering our thanks to the beloved master who has so generally contributed in a large degree the means of making this study.

F. L. J.

(Continued in the JOURNAL for March.)

5. That is, in the Italian language. In English we rather fancy the word *bioblast*, especially in its combination and derivatives. Bioblastic, for instance is more euphonious and is spoken with less effort than "plastidulic." However, other considerations than euphony must be regarded in science. F. L. J.

6. Haeckel, *Ueber die Wellenzeuge der Lebenstheichen oder die Perigenesis der Plastidule*. Bonn 1879.

Influenza is prevailing to quite a considerable extent in Australia.

Opium Smoking is bringing ruin upon hundreds and thousands of families in India, according to a missionary who has been investigating the matter in Brazil.

Dermatology and Genito-Urinary Diseases.

Mercurial Ointment Pills.—It has been found that mercury in a finely divided state may be administered in pill form besides the well-known official powdered hydrargyrum cum creta. Ghillany gives the following formula for the preparation of these pills:

R Unj. hydrarg. cin.....gr. xlv.
 Sacch. lactis pulv.....3 iss.
 M. Ft. pil. No. 100

These pills are to be powdered with sugar of milk. They are said to act much better than the well-known "blue-mass."

Chloasma.—At a meeting of the New York Dermatological Society Dr. Cutler presented a peculiar case of this disease (*Jour. Cut. and Genito-Ur. Dis.*), whose history was as follows: Mary G., aged twenty-four, native of Germany. Dates the beginning of her skin trouble from the time of her voyage to this country two years ago. Before that time her skin was fair, but during the time she was on the ocean the skin began to turn brown in patches about the face. She attributed this to sun-burn and the action of the salt air, but after landing in this country, the brown discoloration instead of getting better grew larger in area and deeper in color, extending down in the neck and chest by increase of size of the former patches and the production of new ones. On inspection the face and neck of the girl is of a dark olive green color almost cyanotic in appearance, while on her chest are several irregular patches of the same color. Her discoloration does not extend below the nipples. Her general health is good.

Inoculation of Chancroid.—As is well-known the chancroid is auto-inoculable and, at times, experimental inoculation is made in order to determine positively the nature of a suspicious genital lesion. L. R. Coignet states, in *Lyon Médical*, that the following is a good method to pursue. As the lesion is often difficult to destroy, it is best to make a small superficial puncture. It should also be made at quite some distance from the genitals, such as the abdomen below the

umbilicus or on the arm, for it is then less active and its progress can be more easily arrested. If there be no sign of inflammatory change, no areola, the next day the inoculation is negative. If there be a light, non-painful zone, it is difficult to make any conclusion. The inoculation may disappear completely or it may develop after some days. But if a true pustule has formed on the day after the inoculation, with a highly inflamed zone at its periphery, it is positive proof that the original lesion is a chancre. The inoculation should be immediately destroyed, by evacuating the pustule and applying either an alcoholic solution of carbolic acid or any of the remedies recommended for the chancre.

Fractures in Syphilitics.—The question of the propriety of operating on syphilitics is discussed by Dr. G. Frank Lydston in the *Medical News*. He is of the opinion that operations heal as promptly and as well as in healthy subjects. Destructive processes do not. He has had a rather limited experience in fractures occurring in syphilitic subjects, but he has not noticed any difference between rapidity and thoroughness in repair of otherwise healthy subjects with secondary syphilis and that in absolutely healthy patients. He mentions the fact that he has seen bad results in cachectic and intemperate syphilitics such cases seeming to be especially prone to necrosis and non-union. My experience which is also rather limited is the same. I have seen a Collé's fracture in a syphilitic result in a perfect recovery in five weeks and the patient was only in ordinary health before he acquired syphilis some two months before the fracture occurred. When rarefying osteitis has set in the results of fractures of the bones so affected are generally bad, necrosis almost always following.

Old-Standing and Impermeable Strictures.—L. S. Senhouse states (*British Medical Journal*), that in such cases in which, owing to the density of the tissues at the seat of stricture, a Wheelhouse's operation is often impossible, he has relieved the patient by the performance of an operation which he devised some years ago.

He passes a soft instrument, such as a catheter, along one of the sinuses into the bladder, and with the catheter as a guide, he then introduces a long probe. Now he either (1) cuts down upon the probe from a point in the mid-line of the

perineum, and having passed a straight silver catheter through this wound into the bladder, withdraws the probe and allows this opening to remain patent; or (2) follows the probe by an incision from the fistulous opening until he arrives at the urethra, and then passes the catheter and withdraws the probe. In this manner he has found it easy to get at that part of the urethra behind the stricture. It is important in the after-treatment to keep the bladder well drained, so that no urine whatsoever may pass through the sinuses. This may be done by attaching to the straight petticoated catheter in the wound some rubber tubing, the other end of which, at a level below the bladder, dips in a solution of perchloride of mercury (1 in 1,000). The results obtained from this operation have been extremely satisfactory, all the sinuses become occluded, the patient passes his urine by the perineal opening.

Chancres of the Female Genitals.—Dr. R. W. Taylor discusses genital chancres in the female in the *New York Medical Journal*, in an excellent paper illustrated by a colored plate presenting nine pictures of as many varieties. He states that as a rule, all chancres of the female genitals are unaccompanied by pain. In some cases itching and burning are complained of, and in some chancres of the clitoris and fourchette severe pain is felt. On the labia majora we find the incrustated chancre, the *ulcus elevatum*, the diffuse exulceration, and the indurated nodule. In the tissues of these parts indurating cedema is often observed as a complication involving large and small portions. This complication is also found as a result of secondary lesions—such as erosions and condylomata lata. On the labia minora the chancrous erosion, the *ulcus elevatum*, and the diffuse exulcerated chancre may be accompanied by mild or tense induration, which may involve part or the whole of the structure. Chancres of the fourchette are of the erosive, incrustated, or diffusely indurated type. Chancres of the introitus vaginæ, meatus, and myrtiform caruncles are commonly ill-defined masses of induration which frequently present no characteristic appearances, and whose diagnosis is usually very difficult, and frequently only possible after considerable delay and observation. Chancres of the vagina are very rare, and then the lesion is not situated high up.

O-D.

Excerpts from Russian and Polish Literature.

Bacteriology of Pleurisy.—At a recent meeting of the Towarzystwo Lekarskie Warszawskie (Warsaw Medical Society) Dr. Mar. Jakowski, house physician to the Infant Jesus Hospital, read a noteworthy paper, (*Gazeta Lekarska*, No. 52, 1891, p. 1054), on the etiology of pleurisy, based on the bacterioscopic examination of pleural effusions in fifty-two cases. Of the number ten cases were those of primary pleurisy, sixteen of pleurisy associated with croupous pneumonia, thirteen of pleurisy in phthisical patients, two of pleurisy accompanying acute articular rheumatism, one complicating typhoid fever, one nephritis, one pericarditis, etc., etc. Of the fifty-two cases, in thirty the effusion was serous, and in twenty-two purulent. The principal corollaries drawn by the author from his researches may be condensed somewhat as follows:

1°. Pleurisies of any form have invariably an infectious or bacterial origin. In other words, they are always caused essentially by various pathogenic microbes, all other etiological conditions, (such as exposure to cold, traumatism, etc.), playing solely an adjacent part.

2°. In such cases in which a bacterioscopic examination of the exudation fails to detect any micro-organisms (which happened in seven out of fifty-two cases of the author) pleurisy is of a tubercular origin, the microbes being embedded within tubercles or in the subpleural tissue.

3°. Pleural inflammation accompanying or following acute croupous pneumonia is most frequently caused by Troenkel-Weichselbaum's pneumococci.

4°. Primary or so-called "rheumatic" pleurisy is most commonly (in seventy per cent. of cases) induced by the same pneumococci.

5°. Such cases of pleural inflammation where the pneumococci alone are detected run a more favorable course than those in which pyogenic microbes—more especially, the *streptococcus pyogenes*—are discovered.

6°. The appearance of the *streptococcus pyogenes* in a serous effusion can be regarded as a reliable indication that the exu-

dation is transforming into a purulent one and that a radical operation must be resorted to at an early date.

7°. In cases of pleurisy accompanying acute articular rheumatism the effusion proves to contain pyogenic microbes.

Atropin as a Hæmostatic.—In the *Vratch*, No. 50, 1891, p. 1121, Dr. A. N. Dmitrieff emphatically draws attention to the fact that atropin affords a very powerful means for controlling any hæmorrhage. He relates two most instructive cases from his practice, one of which refers to a lady with metrorrhagia of a rather obscure causation (the examination having failed to detect anything abnormal about her sexual organs, beyond an atonic condition of the womb). All ordinary hæmostatic measures (such as internal administration of ergot, plugging, and so on), having proven utterly ineffective, the writer tried hypodermic injections of sulphate of atropin, $\frac{1}{200}$ grain, twice daily. After a fourth injection the flooding, which had lasted for a fortnight, stopped completely and permanently, the lady making a speedy recovery. When seen five years later, she continued to enjoy best health. The other case—a still more brilliant one—was that of a lady aged thirty-two, with membranous dysmenorrhœa of nine years' standing. In the beginning of September, 1890, there supervened a formidable menorrhagia, the patient "swimming in her blood in the mornings and daily losing blood in quantities sufficient to soak through six bed-sheets folded sixteen times." A persevering administration of ergot in mixtures and powders, fluid extract of *hydrastis canadensis*, ice, etc., did not produce any slightest impression on the bleeding, all usual symptoms of profound anæmia developing. On September 11, at 2 P. M., sulphate of atropin was injected subcutaneously (a syringeful of a solution of 0.003 gramme in ten grammes of distilled water). In one-half hour the limbs became warm, the face slightly flushed, the pulse fuller and slower, and the subjective state much better. At 7 P. M., the injection was repeated. During the night the hæmorrhage considerably decreased, the patient soundly sleeping until the morning. At 7 A. M., the third and last injection was made. Four hours later the bleeding ceased altogether to never recur. A steady recovery followed. In both of the patients a but trifling dilatation of the pupil was observed, any unpleasant accessory effects being totally absent.—Discussing the *modus agendi et*

medendi, Dr. Dmitrieff points out that the alkaloid possesses a distinct vaso-constricting action and that in this regard it closely resembles hydrastin and hydrastinin.

In an editorial note referring to the paper, Professor V. A. Manasseïn says that he frequently used atropin in cases of phthisical blood-spitting in his clinic and that "sometimes, but by no means always, the result was actually good."

Phosphorus in Rickets.—Dr. J. G. Master, of Professor I. V. Troïtsky's clinic in Kïev, details (*Meditzinskoïe Obozrenië*, No. 18, 1891, p. 535), his experience concerning Kassowitz's method of treatment of rickets and lays down the proposition that "phosphorus constitutes an extremely useful and powerful remedy for the disease which, if employed cautiously and skillfully, can cure the affection much more surely and much more rapidly than all other antirachitic means in vogue." His patients' age varied from two weeks to five years, the series including mild and severe cases, acquired and congenital rickets, etc., general and partial or localized process, Fleischmann's *rachitis dentium et maxillarum*, etc. In such cases where some gastro-intestinal disturbances were present, the phosphorus treatment was invariably postponed until the former had been completely removed by appropriate measures. The *oleum phosphoratum Ph. Ross* (one to eighty) was always used, the dose varying from one-fourth to one-half drop to children under one year of age, and from one-half to one drop to those from one to two years old. As a rule the following formula was employed.

R. Olei phosphorati (*Ph. Ross.*).....gtt x
 Olei Amygdalarum dulcium.....6 grammes (3iss)

M.

D. S. To give ten drops in a teaspoonful of water, once or twice daily, an hour after meals, to a child of two or three.

The almond oil is decidedly preferable to cod-liver oil since, according to Dr. Master's observations, the former "causes an incomparably less irritation of the patient's stomach than the latter oil."

The phosphorus treatment of rickets has been also warmly advocated by several other Russian practitioners—*e. g.* by Drs. Rauchfuss, Anna Shabanova, Semtchenko, Mandelstamm, Troïtzev, etc. Quite recently, Dr. Abram E. Pombrak, of Romanovo-Borisoglebsk, has published (*Meditzinskoïe Oboz-*

rentë, No. 17, 1891, p. 461), a paper in which he highly recommends the treatment on the ground of an extensive trial of five and one-half years' duration. He uses the following formulæ :

R Phosphori.....gr. 1½
Olei Jecoris.....3ij

M.

D. S. A teaspoonful twice or thrice a day.

R Phosphori.....gr. 1½
Olei Amygdalarum dulcium.....3ij

M.

D. S. A teaspoonful twice or thrice a day.

R Phosphori.....gr. 1½
Solve in
Olei Amygdalarum dulcium.....3ij
Deinde adde
Mucilaginis gummi arabici,
Syrupi Simplicis.....3j
Aquæ destillatæ q. s. ut f. emulsio.

M.

D. S. A teaspoonful twice or thrice a day.

Even under most unfavorable conditions (in the absence of such adjuvant means as nutritious dietary, bathing, healthful dwelling, etc.), the children usually begin to gain flesh and color and to generally improve in all regards as soon as they have swallowed two, three or four bottlefuls of the phosphorus mixture. In children with diarrhœas the latter should be first cured, after which either the phosphorus emulsion or the almond oil solution must be prescribed. No disagreeable accessory effects were ever observed by the author in any of his very numerous patients.

Biology of the Intestinal Juice.—The physiological chapter on what the great Swiss encyclopædist Haller once termed *succus entericus* is still teeming with contradictory statements and, on the whole, does not offer to the student anything definite or indisputable. In fact, we do not yet even know for certain whether the intestinal juice belongs to digestive agents or not. In view of this state of things, Dr. David L. Glinsky, of Professor I. P. Pavloff's laboratory, in St. Petersburg, (*St. Petersburg Inaugural Dissertation*, 1891, No. 80, p. 39), has undertaken a course of elaborate experiments on healthy dogs with intestinal fistulæ (established after Prof. Pavloff's method, that is, without forming any isolated intestinal loops), his special problems being *a*, to study the influ-

ence of psychical factors on the secretion of the juice; b, to elucidate the influence of reflex stimuli on the secretion, c, to determine the action of a direct irritation of the intestinal mucous membrane. The author has arrived at the following instructive results:

1°. In healthy animals the intestinal juice is secreted invariably in very scanty quantities.

2°. When in a pure state the juice forms a colorless or slightly yellowish alkaline fluid which consists of a thin liquid the proper *succus entericus*, and a large amount of mucus and which is void of any fermentative or digestive properties.

3°. Mental stimuli (such as showing appetising food to a hungry animal) do not manifest any influence whatever on the secretion of the juice (while they distinctly increase the secretion of bile or gastric juice).

4°. The same is true in regard to reflex stimuli (introduction of food into the stomach).

5°. Pilocarpin increases the secretion but slightly.

6°. The division of the vagi does not induce any alterations in the course of the secretion (in other words, the latter is not dependent upon the pneumogastric nerves), though it causes a marked decrease in the peristalsis.

7°. A direct irritation of the intestinal mucous membrane (by mechanical agents, pepper, ether, bile, etc.), markedly increases the secretion and gives rise to the appearance of extremely viscid mucoid masses resembling boiled starch paste.

8°. All the facts above justify the conclusions that the so-called intestinal juice does not constitute any digestive fluid and that, biologically, it is analogous to mucoid matter secreted by the oesophageal or pharyngeal mucous membrane.

9°. To all appearance, its physiological part is limited to moistening or lubricating the intestinal mucous membrane, and promoting the formation of fæces (as Professor Hermann teaches).

10°. An opalescent enteric juice points to some disturbance in the secretory action of the intestinal mucous membrane.

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Medical Progress.

THERAPEUTICS.

Chorea.—Whilst arsenic is a useful remedy in this disease number of cases of chorea have been reported as cured by the use of iodide of potassium. It is undoubtedly that class of cases in which there is a blood dyscrasia. One grain in solution is given three or four times a day to a child.

Granulation of Wounds.—The *Jour. Am. Med. Ass.* says that Schleich advises the internal use of the iodide of potassium to assist in the granulation of deep wounds. The wounds quickly assume a more healthy appearance. The granulations increase rapidly, and the period of healing is greatly shortened.

Epilepsy.—In this distressing affection every suggestion is grasped on account of its possible value. Poulet, in the treatment of epilepsy advises tincture of Calabar bean with bromide of potassium. In five obstinate cases which were treated with bromide of potassium without results, a cure was accomplished with the addition of Calabar bean.

Removal of Non-Specific Vegetations.—According to the *National Druggist* Madam Tchernomordic, a Russian doctress, vegetations of a non-specific character occurring on the external organs of generation are quickly and easily removed by the "caustic lead" of Boekhart, a composition having the following formula:

Lead oxide.....25 parts.
Solution of caustic potash.....750 parts.

Mix.

Sig.: Wash the growths with any antiseptic liquid and wipe dry, and then touch each one with a little pledget of cotton dipped in the above liquid, after first agitating it. In the course of five minutes the granulations will have been converted into a mass of mucous consistence, easily scraped away. Treat the little burn left with iodoform. If the vegetations are large and numerous, treat them one or two at a time.

Peroxide of Hydrogen in the Treatment of Puriform Cavities and of Fistula.—Dr. H. Graff, a military surgeon of Christiana, publishes in the *Norsk Magazine* the result of his experience of peroxide of hydrogen in the treatment of

abscesses which do not admit of being laid completely open so as to subject them to antiseptic treatment, and of fistulous sinuses offering the same difficulty, (*Times and Register*). The author recommends, in preference to all other antiseptic fluids, irrigation with a fifteen-volume solution of peroxide of hydrogen, which he employed with the greatest success at the Royal Hospital of Christiana. The great development of gas which takes place in consequence of the decomposition of the peroxide when coming in contact with blood or pus, removes the pus very effectually. The irrigation, followed by proper antiseptic dressing, causes a considerable decrease of the discharge, and healing takes place in a remarkably short time. In the case of cachectic patients, when gradulation is slow, Dr. Gaff recommends that the irrigation should be occasionally changed for injections of equal parts of balsam of Peru and ether. The treatment is especially valuable in cases of indurated wounds with puriform cavities. It is, of course, necessary to make due provisions for rapid and free drainage, as the development of much gas may otherwise produce serious pressure.

Non-Diphtheritic Angina.—According to the *Therapeutic Gazette* Dr. Martin's treatment of these acute catarrhal affections of the throat consists in painting the diseased surfaces three times a day with a phenic acid mixture constituted as follows :

R Crystallized phenic acid,
 Camphor,.....āā..... 1 gramme.
 Glycerin,
 Distilled water.....āā.....50 grammes.

M.

The first day, and even the first application, are marked by a notable amendment : deglutition of saliva and alimentary liquids is less painful ; there is suppression of the nocturnal agitation and partial return of sleep. The next day, deglutition is still easier, the sleep good, and temperature nearly normal. The third day, notwithstanding the hypertrophy of the tonsils, which may last some time, the deglutition of solid substances is effected without difficulty ; the fever is gone ; there remains only a general enfeeblement, but the patient may be able in part to resume his occupation.

We would suggest as an equally good local application campho-phenique lightly touched to the parts twice daily.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

Simulation of Hæmophilia.—Prof. Unverricht introduced to the medical faculty of Dorpat at a recent meeting, a patient who for several months past had suffered from severe bleeding from the ears, nose, and eyes. When blood was first discharged from the right ear, the sense of hearing had also become dull on the same side, and the whole right side of the body was paralyzed, hemianæsthesia and hemianopsia being also present. Her medical attendant certified that the right eye could distinguish nothing. About a fortnight afterwards similar symptoms appeared on the left side, and an impediment of speech was observed. Since then she had been completely blind. The paralysis and the dullness of hearing on the left side improved a little but all other symptoms were still present when she was admitted to the clinic. When under treatment there she also suffered frequently from hæmaturia. When the patient on one occasion declared she had voided bloody urine, she was put under the influence of chloroform, and then catheterized, when perfectly normal urine was drawn off. At the same time, a large needle was discovered in her hand, which until then she had been adroit enough to conceal, and which was evidently the cause of self-inflicted wounds and the consequent bleeding from eyes and ears. The needle was put back into her hand before she recovered consciousness. A short time afterwards another bleeding from the ear occurred, but this time the puncture of a needle was plainly visible in the external meatus. Careful examination furthermore resulted in finding that the patient was neither perfectly blind nor deaf with the right ear. It was remarkable that when asked to point at a lighted candle which was placed before her she would first for some time wave her hand aimlessly in the air, and then approaching the light, allow her hand to be singed without moving a muscle. Occasional reflex motions of the lids when the hand approached the light quickly, and several other tests, demonstrated, however, conclusively that the patient could see. Professor Unverricht added to his report on the case his opinion that voluntary bleeding from skin, ears, and eyes—which recognized authorities like Jolly and Strümpell consider genuine—is always due to more or less clever simu-

lation, and he believes that the cause of the bleeding will be found if persistently looked for.

Biological Analysis of the Urine.—The diagnosis of certain infectious diseases by a biological analysis of the urine promises to be an important aid to the means hitherto employed in these cases (*Montreal Med. Jour*). Semmola was led to adopt this procedure through the researches of Bouchard proving the toxicity of certain urines. The first case where the test was employed by Semmola was on one of acute pneumonia following influenza. During the fourth day of the disease the patient was seized with tonic and clonic convulsions, which were considered to be due to a cerebro-spinal meningitis. This supposition was subsequently disproved as the result of the injection into rabbits and guinea-pigs of a small quantity of the patient's urine. In the animals experimented on similar convulsive seizures were induced. After lasting twenty-four hours the convulsions ceased in the case of the pneumonic patient, and the injection of urine no longer induced convulsions when injected into rabbits and guinea-pigs. In a second case the patient had septicæmia as the result of plegmon in his right arm. A septicæmia of a similar clinical form was induced in animals by the injection into them of the patient's urine. After a few days it was found that the toxicity of the urine gradually diminished, and finally when injected no longer induced the septicæmic states which readily followed its earlier administration.

Semmola recommends rabbits and guinea-pigs as being preferable for these experiments. The dose should be small at first, and gradually increased.

Defecation Per Os.—At a recent meeting of the Paris Hospitals Medical Society, M. Desnos, one of the physicians of La Charité, gave the particulars of a singular case, in which, for upwards of two years, defecation had regularly taken place through the mouth, and never by the normal channel. The subject of this perverted function was an epileptic young man, who had escaped from an asylum in the suburbs, and had been brought to the hospital owing to an epileptic seizure. M. Desnos was inclined to regard these attacks as of hysterical nature, and when after one of

them indications of fecal matter were found on his clothes, alleged to have come from the mouth, strict watch was kept upon him to detect any imposture. The patient—who had made the above statement as to his habit of defecation—was therefore guarded, and on two occasions during his brief stay in La Charité, the evacuation *per os* took place in the presence of competent witnesses. It appeared that sometimes this occurred quite quickly and naturally, with but slight efforts of vomiting; at other times it was preceded by a sort of "crisis," during which he experienced acute pain in the back in the region of the cesophagus. He had been supplied at the asylum with peppermint lozenges to dispel the taste left by the evacuation. M. Desnos states that he saw one of the "stools," which filled a porringer; the motion was formed and rather soft, and of a deep-brown color—in fact, obviously of the character of large intestine contents. It was remarkable that it was free from admixture with food matters, although he had had a meal only an hour previously. For some time previously to the defecation the abdomen was hard and distended, even dull on percussion in the lower region—signs which disappeared after it had taken place.

Hypertrophic Cirrhosis of the Liver.—In a paper on this subject Dr. Hugh A. Meredith says, (*Med. News*): The various affections that might be mistaken for hypertrophic cirrhosis because associated with enlargement of the liver, are amyloid and fatty degeneration, cancer, and hydatid cysts. Amyloid degeneration is also characterized by an equal enlargement of the liver, smooth surface, firm, hard, resistant feeling, and a like enlargement of the spleen. But the edges of the liver are sharp, the affection is a painless one, jaundice is absent—the skin being pale and leukemic instead—amyloid degeneration of other organs occurs, and etiologically there is a history of syphilis, prolonged suppuration, or disease of the bones. Fatty liver does not attain the same size, has rounded margins, smooth surface, is soft and flabby. There is no splenic enlargement, an absence of jaundice, the skin shining with fat, and velvety. There is a disposition to fatty deposits in other organs, and no abdominal tenderness. There is a history of alcoholism, long-continued wasting diseases, and high living with sedentary habits. Cancer is ac-

accompanied by tenderness of the liver, hard nodular enlargement, giving it an irregular shape, more rapid development, cancerous cachexia, and frequently in the latter stage jaundice and ascites, an hereditary predisposition, and is usually secondary to cancer of other organs. Hydatid cysts present few of the symptoms of hypertrophic cirrhosis. The enlargement is nodular, large, smooth, soft and elastic, and without pain. The peculiar hydatid fremitus is sometimes obtained on percussion. By use of the exploring-needle a saline fluid, containing the hooklets of the echinococci, may be withdrawn, which settles the diagnosis.

The early stages of hypertrophic and atrophic cirrhosis cannot be distinguished from each other, but, as already pointed out, in the former variety as the enlargement progresses a destructive train of symptoms supervenes. In both varieties the inception is so insidious that remedial aid is not sought until the characteristic changes occur. The etiology does not differ essentially from that of the atrophic form, since in the majority of cases alcohol is the prime factor. Long-continued malarial affections, and certain infectious diseases—as typhus and cholera—predispose to the affection.

Action of Ouabain.—In a long and exhaustive study of the physiological action of ouabain, Dr. Joseph Sailer states (*Therapeutic Gazette*) that it is clear that when exposed to a strong solution of ouabain, the nerve becomes completely paralyzed, and that the muscle becomes far more rapidly paralyzed than if it were exposed to the atmosphere. To summarize the action of ouabain upon the neuro-muscular system, it may be said:

1°. That it diminishes and finally abolishes reflex action by paralysis of the peripheral sensory nerves, and this paralysis then extends to the sensory nerve-trunk.

2°. That it paralyzes the striated muscles by direct action upon their tissue.

3°. That it paralyzes the motor nerves only when the action in the body is very prolonged or when a strong solution is applied directly to the nerve.

4°. There does not appear to be any action upon the central nervous system.

Poison in Violets.—Poison has been found in not only the lilly of the valley, but in the roots and seeds of the violet. These roots have a disagreeable odor when fresh, thus betraying their dangerous properties. They produce nausea and nervous affections of the circulation and respiration, while a sufficiently large dose may seriously affect, and often stop altogether, these functions, in this way bringing about death.

DISEASES OF WOMEN AND CHILDREN.

Causes of Ophthalmia Neonatorum.—In a paper read before the Philadelphia County Medical Society, Dr. T. B. Schneideman said that ophthalmia of the newborn is an *infectious* disease, and can only occur after the infectious matter has come into actual and somewhat prolonged contact with the conjunctiva. The noxious matter is in every instance derived from an inflamed vagina (or urethra), or from another eye. In the great majority of cases infection takes place from the vagina, and it is to be remembered that the disease is not caused by the secretion of a specific (gonorrhœal) catarrh only, but that it may be produced by the secretion of a simple leucorrhœa, or at least by what is recognized as such clinically.

As regards the period when infection occurs, this may take place either during or immediately after birth, or at some subsequent moment. In the former case, the *materies morbi* is derived directly from the vaginal secretion. The child passes through the parturient canal with closed eyes, hence during the passage of the head the secretion can only penetrate into the conjunctival sac in very small amounts, if at all, but it remains adherent to the eyelashes and edges of the lids, and can readily gain an entrance into the eyes as soon as these are opened and the child winks upon the escape of the head. Infection may take place during birth, if anything occurs to displace the soft parts of the face, as may happen in protracted and difficult labors, large size of head, etc., conditions more likely to be present in primiparæ, and with the larger heads of male children. But the time most fraught with danger is usually the moment the head escapes and the child first opens its eyes. In the majority of cases, infection takes place at some time during labor, and the disease first manifests itself from the second to the fifth day; if it does not appear until

later, infection took place subsequent to birth. This may happen by the transference of secretion to the child's eyes in various ways, as by the hands of the attendant, by soiled linen or sponges, etc.; but the lochial discharge, as such, has been found to be incapable of causing the infection, if the woman be free from disease.

Abuse of the Forceps.—Dr. William B. Doherty speaks of the use and abuse of the forceps in the *American Pract. and News*. He says: The dangers of the use of the forceps to the mother are: Laceration of the uterus, vagina, or perineum from a too rapid extraction of the head, fracture of the coccyx and of the bones of the pelvis, and stretching of the ligaments of joints, and lacerations of external genitals, and abscesses arising from contusions.

These unfortunate and dangerous sequelæ are more likely to arise when the child is forced by instrumentation through the pelvis with a degree of speed too great for the elasticity of the vagina and relaxation of the perineum, than if labor be physiologically prolonged. Besides these results from violence, there are reflex headaches, backaches, etc., which so many neurotic women suffer from simple lacerations of the cervix uteri. The dangers which menace the child are: Contusions and injuries to the face, injuries to the scalp, skull, or brain, or paralysis.

The indications for the use of the forceps are not influenced by the duration of the second stage of labor so much as by other conditions.

First, as to the child: The head must be engaged in a suitable position; a decline in the foetal heart sound below 100 during a pain or interval between pains, or above 160 with a weakened impulse; a prolapsed cord, if the pulsations are still present or have ceased but for a short time.

Second, as to the mother: In case of extreme prostration resulting from prolonged efforts at expulsion, temperature above 100°, serious hæmorrhages, convulsions, bruising and compression of the maternal soft parts, varicosities which are on the point of rupturing, and accidental complications of disease.

In any of these conditions of extreme danger to the mother or to the child or to both, the use of the forceps is

imperatively necessary, and its employment is the most conservative of operative or instrumental procedures. But the use of the forceps as instruments of convenience or of speed, to save time, or for the purpose of relieving pain by yielding to the implorations of the sufferer, in case of weak pains or tardy labor, can not be too strongly deprecated.

Besides the dangers from laceration and injuries referred to, serious copious hæmorrhage may set in from the too sudden repulsion of the placenta when the forceps is used too early. Weak pains alone, which can often be combated by the use of hot local applications, warm drinks, etc., are no indication *per se* for the use of the forceps.

SURGERY.

Retroperitoneal Tumors.—Dr. Albert Vander Veer contributes quite an exhaustive paper on retroperitoneal tumors to the *American Journal of Medical Sciences*. He states in regard to their prognosis that without operative interference there is but one termination. The rapidity of the fatal termination varies somewhat with the character of the growth. Pure lipomas are slow—growing until a certain volume is reached, when they proceed with great rapidity to a fatal termination. From a study of the clinical histories found in the literature, he is of opinion that the mean duration of life, after the discovery of the tumor is not more than nine months. Operative treatment offers to us much promise. Recovery has followed the removal of retroperitoneal tumors of great weight, even those weighing fifty pounds. The immediate mortality following operations is from necessity great, yet from the hopelessness of the conditions it is to be urged with great earnestness upon the part of the surgeon. Incomplete operations have been immediately more fatal than those in which the tumor had been completely removed. Like all surgical lesions, these cases illustrate the necessity of early diagnosis and prompt operation.

Czerny, in concluding a paper in which he had reported three cases, concludes that "in all cases operative interference can be safely undertaken; that when the tumor is no longer encapsulated, the incision had better be closed, otherwise the growth enucleated."

Operations for the removal of retroperitoneal growths

will from necessity be subjected to considerable modification in detail. The choice of incision will usually fall in the line of the *linea semi-lunaris*, on one side or the other. Langenbeck's incision for the removal of the kidney may be made use of. Frequently when the incision is at first exploratory, it must be median. When the anatomical relations can be made out, and the operation continued by an extension of the cut, then the more favorable incision is in the *linea semilunaris*. By the separation of the peritoneum from the internal border of the tumor, it may be attached by sutures to the internal border of the abdominal wound making the whole field of the operation extra-peritoneal.

The incision of the posterior fold or blade of the peritoneum should be external to the attachment of the mesentery of the colon, although not absolutely necessary. The removal of the growth by enucleation must be accomplished with great care; particularly is it always desirable to determine the source of the blood-supply and its relations to the great vessels. The *vena cava* has been wounded by accident in the enucleation of these growths. There are likely to be large, thin-walled veins located deeply in the wound requiring ligation. It will be found at times necessary to remove the kidney with the tumor, and here the danger of hæmorrhage is very great. The supply vessels of the kidney will frequently be found very short and difficult to reach.

The length of time required for the performance of the operation will vary necessarily. As long a time as two and one-half hours have been consumed in a difficult operation. As in all strictly abdominal work, the operator must be prepared for any and every possible complication.

After enucleation, as well as when the kidney has been removed with the growth, the cavity must be thoroughly drained, either by full-sized drainage-tubes or by iodoform tamponade.

The after-treatment presents no indications for management other than those of a severe case of abdominal scetion.

Literary Notes.

The **International Medical Magazine** is announced by the Lippincotts of Philadelphia.

The **Gazetta degli Ospitali** has been appearing twice weekly. During this year, however it will appear every Tuesday, Thursday and Sunday.

The **Times and Register** was said sometime since to be contemplating a removal to Chicago. This has been settled by that journal declaring that it would remain in Philadelphia.

The **Cincinnati Medical News** has suffered an irreparable loss in the death of its editor, Dr. J. W. Thacker. He was a man universally esteemed and liked and the people and profession of his home mourn his loss and have felt it very deeply.

The **Book Buyer and Seller** is a monthly journal published in Cincinnati by the Book Buyer and Seller Company. The subscription price is \$1.00 per year and it is a good medium of communication between those who want to buy and sell books.

The **Monthly Register** continues to make its appearance. It is published by the Western Drug Exchange, of Kansas City, and its object is to publish all matters pertaining to the sale or exchange of drug stores, physicians' practices, finding locations, etc.

The **Doctors Weekly** is a new candidate in the field of journalistic literature. It is of small newspaper size, has eight pages of medical matter of a miscellaneous nature and is published and edited by Dr. Ferdinand King, late editor of the *International Journal of Surgery*. It is issued at New York at a subscription price of \$1.00 per year. Dr. King states that he will make his weekly a "hammer".

The **Medical Fortnightly** has made its appearance. Our readers may remember that it was originally announced as the **Fortnightly M. D.**, but the name was judiciously changed to the above. It is a neatly printed journal of thirty-six pages, Dr. Bransford Lewis having its editorial management. A

large corps of collaborators and assistant editors as well as correspondents have been enlisted and it should certainly be a success. It is published in St. Louis at \$2.00 per annum. Its purpose is to represent all the colleges and medical societies in St. Louis, just to show the outside world how much harmony there may be among physicians.

Weekly Medical Review Visiting List is one of the handy issues of these convenient books. It contains a large number of useful printed pages, not the least of which is an accurate posological table. It is gotten up on the perpetual plan. The publishers are J. H. Chambers & Co., 914 Locust street, St. Louis. A feature which will commend it to everyone is the low price—75 cents—as it is handsomely bound in tucks.

An American Text-Book of the Theory and Practice of Medicine, edited by William Pepper, M. D., LL. D., is announced for next June, by W. B. Saunders, of Philadelphia, who will publish the work. It will be completed in two royal octavo volumes of about 1000 pages each, illustrated. The price per volume is quoted as follows: Cloth, \$5.00; sheep, \$6.00; half Russia, \$7.00. The work will be sold by subscription only.

Annals of Ophthalmology and Otology made its initial appearance in January last. It is a quarterly devoted to practical ophthalmology, otology, laryngology and rhinology. James P. Parker, M. D., is the editor, and the first number is a good one, presenting a neat clean appearance and containing good matter. The Kansas City Polyclinic Post Graduate Medical School publishes this journal at a subscription price of two dollars a year.

The Physician as a Business Man is a duodecimo of 144 pages, written by Dr. J. J. Taylor, one of the editors of the *Medical World*, which publishes it in Philadelphia. This book is a collection of reprints and some original matter, in which is contained advice to physicians as to the methods of obtaining the best financial results in the practice of medicine. While the methods and advice given are based upon good financial argument and reason and is sound in general, we very much fear that no book or man can make a business man out of some examples of those practicing medicine. It is a

notorious fact that doctors are poor business men, and they will never be good ones until the public, in general, is educated up to that point that they will look upon medical services as being worth money, and ought to be paid for. To do this is the duty of physicians, but they do not seem inclined to assume the task.

An American Text-Book of Surgery is announced to appear about June 1, 1892. The work will form one large octavo volume of about 1200 pages profusely illustrated, the contributors being Professors Keen, White, Burnett, Conner, Dennis, Park, Nancrede, Pilcher, Senn, Sheperd, Stimson, Thomson and Warren. It will be published by W. B. Saunders, of Philadelphia, and for sale by subscription only, the price being cloth \$7.00; sheep, \$8.00.

Oral and Dental Surgery made quite a respectable showing at the late meeting of the American Medical Association as evidenced in the duodecimo of 125 pages before us which contains the addresses and papers read before the section dealing with those subjects. We wish to repeat our approbation of this method of reprinting the proceedings of sections as it gives a certain permanency to the papers read in a form convenient to those who attended the meetings of sections. In addition to this it is much more convenient when it is desired to refer back to some paper which was read in a given section.

Saunders' Pocket Medical Formulary is a handsome interleaved, patent indexed, duodecimo of 260 pages, containing 1,734 prescriptions, obtained from the leading authorities. In addition to this it has an appendix full of valuable matter, such as diet tables, poisons and their antidotes, a posological table, materials and drugs used in antiseptic surgery, diameters of female pelvis and foetal head, etc. This collection has been admirably arranged by Dr. William M. Powell, and includes much of value to the practitioner. It is published by W. B. Saunders, of Philadelphia, the price being \$1.75 in tucks, and \$1.50 in cloth.

A. B. C. of the Swedish System of Gymnastics is a practical hand-book for school teachers and the home, written by Hartwig Nissen, who has had practical experience in this special branch of instruction, both in Sweden and in this

country. The various movements and apparatus are first described and then is given in detail a table of exercises for the various grades of primary and grammar schools. At present this is the only hand-book on the subject, and from our examination we look upon it as very good and especially simple. A number of engravings render a clear understanding of the exercises a simple matter. This duodecimo of 107 pages is published by F. A. Davis, of Philadelphia, at the low price of 75 cents.

Manual of Physical Diagnosis, for the use of students and physicians, is an excellent little book of 136 pages by Dr. James Tyson. The author's long experience as a teacher of clinical medicine has made him acquainted with the difficulties which present themselves to students in acquiring the art of physical diagnosis. The author's work on the examination of urine was such a pronounced success that he essayed the present, and we can say with truth that he has made this an equally valuable manual. The descriptions and methods which he gives are eminently practical and such as can be easily acquired. A number of illustrations aid in rendering the text clearer. The book is from the house of P. Blakiston, Son & Co., of Philadelphia.

The Diagnosis and Treatment of Eye Diseases is the subject treated of, in a recent number of the Physicians' Leisure Hour Series, by Casey A. Wood, C. M., M. D. The purpose of the manual, to use the author's own words, is to aid the physician to detect and treat, by means always at hand, those diseases of the eye which experience has shown are most frequently overlooked in the course of ordinary practice. Conjunctivitis and the determination of the necessity of wearing glasses are not taken up. The author has given this little manual much useful information without attempting to make an oculist of his reader. This number is published by Geo. S. Davis, of Detroit, and the price is uniform with that of others of the series, 25 cents.

The Modern Treatment of Hip Disease is an interesting monograph by Charles F. Stillman, M. S., M.D. It is a valuable compilation of the methods pursued by the most prominent orthopædic surgeons and it is official as the different surgeons described their methods in letters to the author whose

manner of treating coxitis closes the volume. A liberal use of illustrations has been made and such as are employed by the different contributors. The choice of a method with the general reader will largely depend upon his own opinion and experience. There is no doubt that this little book will prove of the highest interest to surgeons in general. It is published in the Physicians Leisure Library by Geo. S. Davis, of Detroit, at the price of 25 cents.

Book Announcements.—J. B. Flint & Co., New York have in press, and ready early in the current year the following books:

A complete system of Gynæcology and Obstetrics, with 869 new illustrations based upon translations from the French of Pozzi, Auvard, and others, revised by Chas. Jewett, M. D., bound in leather or half morocco, \$8.00.

Flint's Condensed Complete Encyclopædia of Medicine and Surgery. Arranged upon a new system, and embodying the various methods of treatment employed by eminent practitioners. The most valuable and complete work of this nature ever published. The result of a year's labor of a large corps of writers. Leather or half morocco, two volumes, \$8.00 per volume. The above works sold by subscription.

Also in press, ready March 1, the Electro-Therapeutics of Gynæcology, by Augustin H. Goelet, M. D. Cloth bound, \$2.50.

Books Received.—The following books were received during the past month and will be reviewed in future issues of the JOURNAL:

A Practical Résumé of Modern Methods Employed, in the Treatment of Chronic Articular Ostitis of the Hip, by Charles F. Sullivan, M. Sc., M. D. 12mo., pp. 118, (Physician's Leisure Library). [Detroit: Geo. S. Davis. 1891. Price, 25 cents.

Manual of Physical Diagnosis for the use of Students and Physicians, by James Tyson, M. D. 12mo., pp. 136. [Philadelphia: P. Blakiston, Son & Co. 1891. Price, \$1.25.

A Manual of Practical Obstetrics, by Edward P. Davis, A. M., M. D. 12mo., pp. 298, with 140 Illustrations, two of which are colored. [Philadelphia: P. Blakiston, Son & Co. 1891. Price, \$2.00.

The Ophthalmoscope, a Manual for Students, by Gustavus Hartridge, F. R. C. S., with 63 Illustration, pp. 128. [London: J. & A. Churchill. 1891.

Addresses and Papers read before the Ophthalmological Section of the American Medical Association at the 42d meeting, held at Washington, D. C., May 5-8, 1891.

Pamphlets Received. — The following pamphlets have been received during the past month, and the thanks of the JOURNAL are extended therefor: Weitere Erfahrungen mit Oesypus, von Dr. Ihle, (Sonder-Abdruck aus *Monatshefte für Praktische Dermatologie*, XIII, Band, 1891); Die Behandlung des Erysipels, von Dr. Stanislaus Klein, (Sonderabdruck aus der *Berliner Klinischen Wochenschrift*, 1891, No. 39); Ichthyol—Behandlung varicösen Unterschenkelgeschwure, von Dr. Günther, (Separatabdruck a. d. *Corresponding-Blatt fuer Schweiz. Aerzte*, xx, 1891); Nouvelles observations concernant l'Action Thérapeutique de l'Ichthyol, par A. Stocquart, (Extrait du *Journal d'Accouchements*, Août, 1891); Ichthyol. A contribution to its Therapeutics, by T. Cranstorn Charles, M. D. (Report from the *Lancet*, September 26th, 1891); Beitrag zur Freund'schen Ichthyol behandlung der Frauen-Krankheiten, von Dr. Edgar Kurtz, (Sonderabdruck, a. d. *Dent. Med. Wochenschrift*, No. 43, 1891); Einige Ehrfarungen bei externer und interner Anwendunge des Ichthyols, von Dr. Alb. Müller. (Separatabdruck a. d. *Corresp.-Blatt fuer Schweiz. Aerzte*, 1891); Zur Ichthyol behandlung in der Frauenheilkunde, von P. J. Kotschan, Volkman's Sammlung No. 35, 1891); Thirty-sixth Annual Announcement of the Kentucky School of Medicine, Session of 1892; the Surgical Treatment of Pyloric Stenosis, with a Report of Fifteen Operations for this Condition, by N. Senn, M. D., Ph. D. (Reprinted from the *Medical Record*, November 7 and 14, 1891); Preliminary Announcement of the Woman's Medical College of St. Louis, Mo., for 1892; Annual Report of the Postmaster-General of the United States for the fiscal year, ending June 30th, 1891); Philadelphia Maternity Hospital Report for 1891; Etiology and Treatment of Nasal Catarrh, with Special Reference to the Deviated Septum, by Hal Foster, A. B., M. D. (Reprinted from the *Kansas Medical Journal*, December, 1891.)

Book Reviews.

Causes and Treatment of Sterility in Both Sexes and Fecundation by Artificial Methods. Translated from the French of DR. J. GERARD, Paris, with Notes by CHARLES EVERETT WARREN, M. D., 12mo., pp. 552. Printed for Private Use only by the Profession. [Boston: International Medical Exchange, 1891 .

If our readers will remember, we had occasion to review the first part of this work some time ago. We now have the entire book and it is an addition to medical literature of real worth and while the work treats nominally of sterility it deals incidentally with the relations of the sexes and the hygiene of the sexual organs. We could not conscientiously recommend the work to the general public, but to physicians there is much to commend it. It contains a great fund of knowledge on subjects which are not treated of ordinarily in medical works.

The style is rather colloquial in manner but withal very clear and the suggestions which are given are sound in principle. The method of artificial fecundation is particularly dwelt upon and the details of the method fully entered into. The author is an ardent advocate of the method looking upon it as a fairly certain procedure, providing sufficient care and attention to details be given.

Dr. Warren has done his work in a most excellent manner. He has preserved the style of the author in a manner which is highly commendable. He has also interjected notes which add value and interest to the text.

The illustrations in this book are numerous and of rather a suggestive nature. Indeed, they are an interesting reflex of the French capabilities in this direction and with the careful retouching bestowed upon them by the translator their value and interest has been enhanced.

This edition is a limited one and there are but few copies left. We have no doubt, but that a second edition will be called for by the demand which will be created by those who have not been fortunate enough to obtain a copy of it.

Medical Publications. Harvard Medical School. Vol. II. 1890.

This is a collection of eighteen reprints by different authors connected with the Medical Department of Harvard University. In this collection clinical papers have been omitted, the articles containing original work only. The articles are all of a high order of merit and evince the fact that original work in this country can compare favorably with that of Europe, in every respect. The papers presented in this volume have attracted much attention at home and abroad and we consider ourselves fortunate in possessing this collection.

Essentials of Anatomy and Manual of Practical Dissection, together with the Anatomy of the Viscera, prepared especially for Students of Medicine. By CHARLES B. NANCREDE, M. D. Fourth Edition revised and enlarged by an appendix containing Hints on Dissection. By J. CHALMERS DACOSTA, M. D., based upon the last edition of Gray's Anatomy.. Fourteenth Thousand, 8vo. pp. 388. Thirty Handsome Full-Page Lithographic Plates, in colors, and 188 Fine Woodcuts [Philadelphia: W. B. Saunders, 1891. Price: cloth or oil-cloth, \$2.00; sheep, \$2.50.

We cannot commend this book more highly than by mentioning the fact that it is more in demand than ever by medical students, who use it as a guide in their dissections. It is probably one of the best compends on anatomy which is published and Nancrede's Anatomy has become a vade mecum with those engaged in the study of the subject. The demand for it is a constant and steady one and it is due to the intrinsic worth and merit of the book.

The lithographic colored plates are alone worth the price asked for it and aid the dissector in a way which we have had demonstrated to us a number of times in our casual visits to dissecting rooms. The descriptions given are clear and concise and sufficiently full to answer all practical purposes. An addition of much value is the appendix devoted to hints on dissection.

The part devoted to osteology is very full, the illustrations being reproductions of Gray's which are so well known as examples of clearness and accuracy.

An excellent idea has been to issue an edition bound in oil-cloth for use in practical anatomy. As this binding is impermeable to moisture it obviates the necessity of putting oil-cloth covers and thus preserves the work without detracting from its appearance.

While of the highest value to students of medicine, this anatomy constitutes an excellent remembrancer for the practitioner who desires to brush up on this subject. The colored plates will often elucidate in a moment some forgotten point and thereby save much time or perhaps prevent negligence due to disinclination to consult a larger work.

We can heartily commend this work to all those desirous of having a reliable compendium of anatomy.

Age of the Domestic Animals. Being a Complete Treatise on the Dentition of the Horse, Ox, Sheep, Hog and Dog, and on the various other Means of Determining the Age of these Animals. By RUSH SHIPPEN HUIDEKOPER, M. D., 8vo., pp. 225. Illustrated with 200 Engravings. [Philadelphia and London: F. A. Davis. Price \$1.75.

This is the most comprehensive work up to the present time in the English language on the age of the domesticated animals. Chapters are devoted to the structure of the teeth, to the duration of life in the horse, to the eruption of the temporary and the permanent teeth, which is discussed at great length, to the irregularities of the dental system to the age of the ass, mule, and hinny, to the age of the ox, age of the sheep and goat, age of the hog, age of the dog, and finally the age of man. Age is judged in the majority of animals by the teeth, but "in the ox and sheep the epidermic products in the shape of horns are also important factors after they have become adult." All of the domestic animals have two sets of teeth; first, those of *first dentition*, which appear at or soon after birth, which are known as *fœtal*, *temporary*, *milk*, *deciduous*, or *caducous* teeth; second, those of the second dentition which are known as *replacing*, *persistent* or *permanent* teeth. The adult horse has forty, the adult mare thirty-six teeth, the difference in number being due to the four canine teeth or tushes of the male, although well developed tushes are not seldom seen in the mare, and the reviewer has seen them as an hereditary peculiarity in mares

and their female descendants. We find sometimes both in the young and in the adult animal, a more or less rudimentary pre-molar tooth commonly known as the wolf-tooth, which raises the number in the adult animal to forty-four; they are most frequently present in the upper jaw and are early seen in the lower. The formula for the permanent dentition of the horse on one side is

Superior Jaw } Incisors $\frac{3}{2}$; Tushes $\frac{1}{2}$; Molars $\frac{4}{2}$.
Inferior Jaw }

The full formula may be thus considered.

Temporary	3	.	0	.	3	
	3	.	0	.	3	= 24
Permanent	3	.	1	.	6	
	3	.	1	.	6	= 40.

A few practical points may now be selected from the work for the benefit of the lay observer who especially is interested in things equine. In the horse the age is chiefly judged by the appearance of the tables of the incisor teeth, as they are gradually protruded and worn away in succeeding years. In the young animal the incisors meet and form an arch, which, if viewed in profile, represents the half of a circle." "The incidence of the arches acquires greater obliquity with age. The crowns of the six incisor teeth in the young horse, widened from side to side, while their roots are flattened in their transverse diameter, cause the teeth to take a position on the end of the jaw like the ribs of an open fan. They diverge from the alveolar cavities in which they are imbedded in the bone toward the circumference formed by their crowns. But as age advances their crowns become worn off and the teeth are pushed further and further out of their cavities. The roots, which at first were almost in contact with each other, gradually separate and widen, while the circumference constantly diminishes as the teeth become worn down until they assume a parallel position and finally converge instead of diverging at their free extremities." The intermediate teeth become separated from the pinchers on the one side, and the corner teeth become separated from them on the other until a distinct space is visible between them, which is filled by pale gum. Other gross indications of age are briefly: At first the incisors are "flattened from in front to behind, that is to say its transverse diameter is greater than its antero-posterior; next becomes oval, next rounded the two diameters

becoming nearly equal, becomes triangular, and has three borders, one anterior, and two lateral; the apex of the triangle looks backwards. Finally the table surface is flattened from side to side. This last form characterizes very old age, and lasts for the life of the animal."

The work is of great value to all interested in comparative anatomy, and lovers of animals. It will fill the niche so long vacant in this department, and will undoubtedly be adopted as a text book in the veterinary colleges of Great Britain and America. Dr. Huidekoper is to be congratulated upon the very thorough manner in which he has treated the subject, and the excellence of the illustrations on almost every page, which add so much to the practical value of the book.

H. F. J.

The Comparative Anatomy of the Domesticated Animals. By A. CHAUVÉAU, M. D., LL. D. Revised and Enlarged, with the co-operation of S. ARLOING. Second English Edition, translated and edited by GEORGE FLEMING, C. B., LL. D., F. R. C. V. S: Large 8vo., pp. 1084. With 585 Illustrations. [New York: D. Appleton & Co. 1891.

Chauveau's Comparative Anatomy is one of the best works on the subject and the accretions which have been incident to it of late years have made it a standard of the highest value. The edition before us is a copy of the second English edition translated from the fourth French. The revision of the original was made with the co-operation of M. S. Arloing, the well-known director of the Lyons Veterinary School. The translation is not only a good one, but critical as well by a gentleman whose competence is universally conceded, he being, among other things, examiner in anatomy for the Royal College of Veterinary Surgeons.

The work is a thoroughly comprehensive one and deals in a most thorough manner with the comparative anatomy of the domesticated animals. A careful description is given of the various anatomical parts and the comparison clearly and lucidly stated in reference to the different animals. The subject is not a dry résumé of anatomical details, but is an interesting essay upon points which gain added interest from the manner in which they are considered. The reader first be-

comes interested then fascinated by the various problems which are opened up to him, until he eagerly recurs again and again to the work. The high scientific character of the book recommends it to thoughtful students and to these it is not only interesting but of the highest value as well.

The scope of the work has been considerably enlarged by the translator who has added the anatomy of the ass, mule, and rabbit, as well as that of the camel—that animal being utilized in the British army in various parts of the world, and efforts having been made to domesticate it in this country. This is certainly a notable improvement as it enlarges the number of points of comparison and, in many instances, supplies missing links which existed in the absence of these subjects of comparison. This addition is made by the English translator and is the best evidence of his capability of treating the subject in a manner befitting it. It has necessitated the addition of about one hundred figures which aid greatly in elucidating the text as do the others. And this is one of the strong points of this work—the number of illustrations, there being over five hundred. It is not only the anatomy of the domesticated animals which is exclusively given, but human anatomy is introduced sufficiently to make the physician understand the value of the work so far as his special studies are concerned.

A new English edition was certainly called for as it is seventeen years since the first made its appearance. The progress made during this period and the high esteem in which the first edition has been held certainly make this a most welcome arrival. The great advantage possessed by the translation and one which we cannot praise too highly is the very copious and accurate index which is appended, a convenience which cannot be found in the original. There is no doubt whatever, in our opinion, that a full index enhances the value of a work to quite a considerable degree.

We do not wish to omit mentioning a very important section of this work, which is devoted to embryology. The only fault which we have to find with it is that but about fifty pages are devoted to this; but, no doubt, this is a subject the full consideration of which properly appertains to the domain of embryology.

We have not the space to devote to a critical review of this most excellent and valuable work. But we can heartily commend it and we think that no progressive physician should leave his book-shelves lack this edition of Chauveau's Comparative Anatomy.

So far as the mechanical execution of the work is concerned it is faultless. The paper is excellent, the binding elegant, and the type large and clear, so that reading is greatly facilitated. The illustrations are good and clear so that no complaint can be made on this score.

Society Proceedings.

THE CLINICAL SOCIETY OF MARYLAND.

BALTIMORE, December 18, 1891.

The society was called to order by the President, Dr. Robert Johnson.

Dr. C. W. Mitchell read a paper entitled "After Inflammation—What?"

Dr. Wm. Camfield read a paper on "Dust as a Causative factor in Pulmonary Disease." The various kinds of dust may be divided into animal, mineral and vegetable. Opinions differ as to which kinds are most dangerous when inhaled. That which is generated in brush factories is animal and very harmful. Makers of hats, especially felt hats, suffer much from the dust evolved. The vegetable dust that does the greatest and most lasting injury to the lungs is that generated in tobacco factories. This dust has not only a mechanical action but has also poisonous effects.

It is in connection with the inhalation of mineral dust that the greatest amount of scientific investigation has been made, especially in relation to the diseases called the consumption of grinders, miners, potters, etc. Anthracosis, silicosis, siderosis, chalicosis, tabacosis and other kindred names have been

suggested to describe a similar condition produced by various kinds of dust. Zenker has handed down the word "pneumonokoniosis" to cover all these conditions. The history of these cases is very much alike. They begin with simple bronchitis which gradually becomes chronic. They are usually non-tuberculous, at least at the beginning tuberculous complication is only an accident.

When one is exposed to an atmosphere of dust the contact of this dust with the sensitive nasal and laryngeal mucous membrane sets up coughing and sneezing and much of the dust is expelled and for a time no harm results; but a continued exposure to this dust causes a congestion of the mucous membrane of the nose and breathing passages and, in time, an inflammation of the whole tract; the ciliated epithelium loses its power and dust finds its way to the ultimate ends of the lung tubules. When the individual is asleep or absent from this irritation, the ciliated epithelium gets rid of a large part of this foreign substance, and the wandering cells may close around some of this dust and try to carry it off or render it harmless by burying it in a lymphatic gland. Much, however, finds its way either through the epithelium or between the cells into the submucous layer, getting into contact with the connective tissue of the alveoli and by irritation causing a hypertrophy of this tissue and a condition resembling chronic interstitial pneumonia or fibroid phthisis. The general opinion seems to be that the fibroid condition seems to oppose a direct barrier to the growth and multiplication of the bacillus tuberculosis, and in large tracts of lung tissue converted into this material often not a bacillus could be detected. In one of the author's cases, bacilli were found in abundance and yet two years afterwards the man reported himself as entirely well.

The color of the expectoration is a prominent sign in these cases. In one case of the author, a stoker, the expectoration still continues absolutely black at times, and always tinged although it is almost two years since he gave up his occupation. Examination of this sputum under the microscope showed it to contain in abundance carrier cells which in all cases contained pigment and in some instances the black crystalline coal could be recognized within these cells. This pigment and foreign material has a tendency to collect at the

apices of the lungs and is only present at the bases when the dust inhaled is excessive in amount and exposure prolonged.

In diagnosis, physical signs do not yield as much as the microscope. By the microscope we see the cells containing the dust. In the author's cases (four) râles were heard on auscultation but nothing marked was obtained on percussion.

The prognosis is good if the man has not worked too long at the occupation.

The treatment is to take the patient from his dangerous occupation when improvement begins at once. Owners of large factories are adopting stringent prophylactic measures in order that they may not lose so many good workmen. The best methods are: (1). To prevent the formation or escape of dust by using wet grinding or by grinding in closed vessels. This is not always practicable. (2). To prevent inhalation of dust by wearing respirators, etc. But these are uncomfortable and the men remove them at every opportunity. (3). The removal of dust as fast as it is produced by using fans and air shafts. This is by far the best plan.

Still further the following rules should be enforced. (1). Workmen should change their outer clothing after work. (2). They should keep their faces and hands as clean as their work will allow. (3). They should never be allowed to eat in the workroom.

Dr. Randolph Winslow related a case.

A Case of Elephantiasis Scroti. J. C., colored, aged forty-four years, was admitted to the University Hospital, September 7, 1891, on account of enlargement of the scrotum and perineum. His father died of meningitis and his mother of phthisis. Patient is one of seven children, six of whom died of phthisis. He had measles in childhood, typhoid fever at twenty, and gonorrhœa about eight years ago. The present disease began about three years ago, with slight thickening of the tissues of the scrotum, penis and perineum, the infiltration first showing itself in the skin of the scrotum and increasing slowly until at the time of his admission the scrotum was enormously enlarged and reached one-third of the distance to the knees. There were a number of suppurating sinuses and superficial abscesses in the scrotum and perineum. There was some pain. The tissues of the scrotum were brawny and very little impression could be made on them by pressure.

The perineum was composed of similar tissue and was enormously hypertrophied. The skin of the penis was also thickened but retained its suppleness and the prepuce could easily be retained. The patient said that his virile powers were unimpaired. He was a sailor, but had never been much beyond the coast of this county and had never resided in a tropical country.

Several efforts to detect the *filaria sanguinis hominis* were unsuccessful.

The sinuses were incised and a long incision made in the perineum to relieve tension and allow the lymph and blood vessels to empty themselves. He was placed upon iodide of potassium as syphilis could not be excluded. He did not improve, and excision of the scrotum and perineal hypertrophy was performed October 1. The skin and subcutaneous tissues were very dense and thick and freely supplied with blood vessels. The testicles were carefully dissected out and were uninjured. The gap in the perineum was closed with sutures, but there was not sufficient tissue to cover the testicles, hence lateral incisions were made in the continuous skin and strips of skin dissected up and brought over so as to form a new scrotum. The tension was great and the stitches cut out allowing the flaps to separate considerably. Healing was effected under about five dressings and he was discharged well on November 8, relieved of pain and discomfort and ready again to resume his ordinary avocations.

W. T. WATSON, Secretary.

PAN AMERICAN MEDICAL CONGRESS.

The International Executive Committee of the Pan American Medical Congress.

The Committee on Organization of the Pan American Medical Congress, at its meeting at St. Louis last October, elected the following International Executive Committee: The Argentine Republic, Dr. Pedro Lagleyze, Buenos Ayres; Bolivia, Dr. Emelio Di Tomassi, La Paz; Brazil, Dr. Carlos Costa, Rio de Janeiro; British North America, Dr. Jas. F. W. Ross, Toronto; British West Indies, Dr. James A. De Wolf, Port of Spain; Chili, Dr. Moises Amaral, Santiago; United States of Colombia, Dr. P. M. Ibanez, Bogota; Costa Rica,

Dr. Daniel Nunez, San Jose; Ecuador, Dr. Ricardo Cucalon, Guayaquil; Guatemala, Dr. Jose Monteris, Guatemala Nueva; Haiti, Dr. D. Lamothe, Port au Prince; Spanish Honduras, Dr. George Bernhardt, Tejucegalpa; Mexico, Dr. Tomas Noriega, City of Mexico; Nicaragua, Dr. J. I. Urtecho, Grenada; Peru, Dr. J. Casamira Ulloa, Lima; Salvador, Dr. David J. Guzman, San Salvador; Spanish West Indies, Dr. Juan Santos Fernandez, Habana; United States, Dr. A. Vander Veer, Albany, N. Y.; Uruguay, Dr. Jacinto De Leon, Montevideo; Venezuela, Dr. Elias Roderiguez, Caracas.

Hawaii, Paraguay, Santo Domingo, the Danish Dutch and French West Indies are not yet organized. Nominations of local officers have been received from a majority of all the members of the International Executive Committee, and a number of the lists have been confirmed by the Committee on Organization. These will be announced as rapidly as acceptances are received.

CHARLES A. L. REED,

January 15th, 1892.

Secretary-General.

Auxiliary Committee (each member being the official representative of the Congress in his respective city): Dr. Nicolas Osorio, Dr. Andrés Posada Arango, Dr. Jorge E. Delgado, Dr. Eugenio de la Hoz, Dr. Domingo Cagido, Dr. José Manuel Rodriguez, Dr. Paulo Emelio Villar, Dr. Felix M. Hernandez, Dr. Rafael Calvo, Dr. N. Ribon, Dr. Milceades Castro, Dr. Cayetano Lombara, Dr. José M. Martinez, Dr. Isaias Saavedra, Dr. Severo Fores, Dr. N. Villa, Dr. Everisso Garcia, Dr. Miguel Caicedo, Mr. Emilio Villamizar.

The following medical societies have been elected as auxiliaries of the Congress, viz: Academia Nacional de Medicina, Academia de Medicina de Medellin, Sociedad de Medicina del Cauca.

The following journals have been designated as official organs of the Congress, viz: *Revista Medica*, Bogota; *Revista de Hygiene*, Bogota; *El Agricultor*, Bogota; *Boletin de Medicina del Cauca*, Cali; *Anales de la Academia de Medicina de Medellin*, Medellin.

The expressed wish of the profession of the United States of Columbia is for a date of meeting during the Columbian Exposition.

CHARLES A. L. REED,

CINCINNATI, January 17, 1892.

Secretary-General.

Melange.

Alvarenga Prize for 1892.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Aivarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1892. Essays intended for competition may be upon any subject in medicine, and must be received by the secretary of the college on or before May 1, 1892. It is a condition of competition that the successful essay or a copy of it shall remain in possession of the college.

An Insane Asylum in Florida.—There seems to be something wrong with the Jacksonville Insane Asylum if the telegraphic reports are to be believed (*Med. Rec.*) It is stated that a man who called recently to see his wife, a convalescent patient, was somewhat astonished to find her in the family way. Then another of the patients drowned himself in the tank from which the water-supply for the asylum was drawn, and the body was not discovered for more than a month. When found it was much decomposed, but it was simply removed, the report states, no effort being made to clean the tank in which it had lain.

St. Louis Dental Society; Officers, for 1892.—The St. Louis Dental Society met at the residence of Dr. Conrad on January 5, 1892, and elected the following officers for the ensuing year.

President, Dr. Geo. Robitoy; Vice-President, Dr. Walter M. Bartlett; Recording Secretary, Dr. J. B. Vernon; Corresponding Secretary, Dr. John G. Harper; Treasurer, Dr. Henry Fisher. Committee on Publication, Drs. Helmuth, Lindsley and Keith. Committee on Membership, Drs. Morrison, Hickman and Spaulding. Committee on Ethics, Drs. Baird, Prosser and McNamara.

The Executive Committee consists of the officers of the society. Regular meetings are held on the first Tuesday of each month, excepting July, August and September.

Glass Eyes and Matrimony.—Mr. Henry Riley states (*N. Y. Med. Times*), that a very curious case was recently

begun in the Court of Common Pleas of New York City which involves the right of a person to marry without first informing his wife that he has a glass eye. The husband asks to have the marriage annulled, and alleges in his complaint that after the contract of marriage was entered into the "defendant refused to live with the plaintiff on the ground and for the reason that the plaintiff suffered from an infirmity, to wit, having an artificial eye, which she claimed she had prior to this time been unaware of." It would seem that the acquaintance between the parties could not have been of that character and continuance which is usually thought necessary for so important a contract as matrimony, or else that the artificial eye must be of very superior workmanship and be manipulated with extraordinary skill. It might be well for the opticians to follow this case up and ascertain if their calling has taken a great stride forward in mechanical excellence.

Marine-Hospital Service.—The report of the Supervising Surgeon-General shows that during the last year there were 52,992, sailors treated in the various marine hospitals and dispensaries, says an exchange. There were 1,182 pilots examined for color-blindness, of which number twenty-nine were rejected. There were 1,664 vessels inspected at the national quarantines, of which one hundred and thirteen were detained for disinfection. At the Gulf Quarantine Station, on Chandeleur Islands, forty-six vessels, badly infected with yellow fever, were held and disinfected, and twelve yellow fever patients were taken from these vessels into the lazaretto. As a result not a single case of yellow fever developed on the coast guarded by this quarantine. Attention is called to the increased number of cases of leprosy discovered in the United States, and suggests the necessity of a national asylum. Owing to the prevalence of cholera in the East, and to want of uniformity in the local health regulations at several of the ports of entry in the United States, a circular has been recently issued prohibiting the entry of rags imported from Marseilles unless previously disinfected.

Queer Things in Literature Concerning Doctors and their Doings.—In the *Revue des Deux Mondes*, June 15, 1877, according to a French journal, the following radical operation for croup is mentioned in the "Mari de Suzanne." "She told me in a few broken words that Pierre had an inflamma-

tory throat trouble after my departure. . . . Félicien cared for him from the first. . . . Incision of the artery (*sic*) became necessary, followed by a fatal issue, the instant the lips were applied. I listened speechless, paralyzed by emotion." No wonder! The *Mercredi médical*, October 28, 1891, quotes from a French novel, which treats of one Dr. Livournet, who "pulls Xavier through an attack of croupous scarlatina, and then cures Gilberte of abominable meningitis." Later in the same book, is noted a remarkable phenomenon: "At the bottom of this glass the chloroform had left its opium-tinctured and unsavory deposit." Sometimes botany, as well as *materia medica*, is astray in secular literature. Mendes, in "Zo'har," speaks of the aconite plant, with its blossoms like white umbrellas. "Umbrellas!" Never. And aconite is white so seldom. Why not say in blue clusters? It is almost as poetical, and much more truthful.

Texas Journals are exploiting a female fraud named M. H. Lewis, who has been advertising to prevent conception without the use of medicine or instruments and without pain, danger, or in any way interfering in the husband's marital rights. Five dollars is the price asked by the fraud for the recipe, which latter is as follows:

"Never Catch your breath when thare is eny dainger of conception alwais hold pour breath at least one half minute at the time of your Husbans discharge and the conception will return if you will folow this rule I will garntee you not bare and if at eny time you should fail to hold your breath take a cold bath ameadtly after intercourse."

This puts us in mind of a recipe given by the old housekeeper to a chamber-maid in a big hotel for a similar purpose. "Say, Mrs. McCann," said the maid, "you do be livin a long time in dis house, and foolin' wid de drummers, and nivver got caught. How do you work it?"

"It's aisy enough," says Mrs. McCann, "jist kape your eyes on de felly's and when he begins to get crass-eyed, make him stop."

A few months afterward the maid was "in trouble," and appealed to the housekeeper again. "Fwhy didn't ye do," says the latter, "fwhy didn't ye do as I tolud ye?"

"Musha," says Katy, "dat was no good. Long before his eyes was fixin to get crass I was shtone blind."

Local Medical Matters.

Dr. Charles Lewis has been permanently appointed to the position of physician to the Work-House.

Dr. Benno von Steinmetz has resigned his position as one of the physicians of the City Dispensary on account of increased private practice, which makes demands upon his time. **Dr. McMillan** has been appointed to the vacancy.

The St. Louis Polyclinic and Emergency Hospital has opened its doors at 2344 Olive street. Daily clinics are being held and the hospital will soon be ready for the reception of patients. The staff is composed as follows: Operative Surgery, **Drs. A. C. Bernays** and **W. V. Kingsbury**; Women's Diseases, **Dr. C. F. Frank**; Ophthalmology, **Dr. C. Barck**; Children's Diseases, **Dr. W. W. Graves**; Otology and Minor Surgery, **Dr. W. F. Thornton**; Genito-Urinary Diseases, **Dr. Geo. D. Thompson**; General Medicine and Nervous Diseases, **Dr. Hugo Summa**. The entire arrangement of the building is excellent and its location is a central one and calculated to build up a large clinic.

St. Louis Medical Society.—At the annual meeting of the St. Louis Medical Society the following officers were elected to serve during 1892:

President, **Dr. Walter Coles**; Vice-President, **Dr. W. B. Dorsett**; Recording Secretary, **Dr. T. O. Guhman**; Corresponding Secretary, **Dr. W. J. Langan**; Treasurer, **Dr. G. Hurt**.

At the succeeding meeting, or the first one held in January, the President appointed the following standing committees:

Executive.—**Drs. A. V. L. Brokaw, H. C. Dalton, E. C. Burnet.**

Ethics.—**Drs. T. M. Scott, F. J. Lutz, T. A. Martin.**

Elections.—**Drs. F. D. Mooney, F. A. Glasgow, Robert Barclay.**

Publication.—**Drs. W. L. Blickhahn, G. W. Homan, Geo. E. Atwood.**

Library.—**Drs. H. Hickman, Y. H. Bond, R. J. Stoffel.**

The Society has no official organ at present and so far as we have learned no definite action has yet been taken in the matter.

THE ST. LOUIS Medical and Surgical Journal.

Whole No. 615.

VOLUME LXII.—MARCH, 1892.—No. 3.

Original Contributions.

SOME NEW STUDIES OF THE OPIUM DISEASE.* By T. D. CROTHERS, M. D., Supt. Walnut Lodge Hospital, Hartford, Conn.

As a preface, I wish to express my emphatic dissent against the common use of the word *habit*, in describing the opium disease. The popular meaning conveyed by this term is some state or condition voluntarily acquired and retained with the certainty of being thrown off at any time at the will of the patient. This view assumes a knowledge of the physiology and psychology of the brain and its functions that is not yet attained. Hence the use of the word is incorrect, wrong, and contradicted by the facts in the clinical history of each case. It also conveys a false impression of the nature and origin of such cases, and is a word to which different meanings will always be given. No other word is more misleading and confusing, when applied to opium, alcohol, and other border-land neuroses.

Beyond all question, the toxic use of opium and its alkaloids is rapidly increasing. Only about fifty per cent. of opium and morphine manufactured is required by the legitimate demands of medicine and pharmacy. The enormous balance is consumed in some unknown way. Comparative estimates make the number of opium cases in this country over a hundred thousand. Whether this is correct or not, it is evident that the number is very great and largely concealed,

*Read before the Philadelphia County Medical Society, January 27, 1892.

and many of them are very hopeless and difficult to treat. The natural history of such cases indicates a steady, progressive degeneration, on to death. Recovery is rarely spontaneous, and without the aid of applied science. Up to the present all clinical studies have been confined to the symptoms and treatment, starting at some indefinite point after the opium addiction begins. The old superstition of a moral origin, and of some wilful, wicked impulse, is accepted as the first original cause. Writers, and even specialists, seldom go back into the early etiology, or inquire what conditions or forces led to the first use of opium. The object of this paper is to trace some recent facts which throw new light on this unknown stage of etiology.

From a careful clinical study and grouping of the history of a number of opium cases, it is evident that a large proportion have a distinct *neurotic diathesis*, or, more literally, have inherited from their parents some condition of brain and nerve defect which favors and predisposes to the development of neurotic diseases. A more careful study of these records shows that in some cases an *opium diathesis* is present, or a special inherited tendency to use opium. Here are two conditions which influence and favor this disease. It is a well-known fact that a large proportion of all nerve and brain diseases appears in children of neurotic and defective parents. Such children have received some special tendency and predisposition favoring the growth of nerve diseases, springing into activity from the slightest causes,

The latency or activity of this diathesis will depend on certain conditions of life and surroundings, which in many cases can be traced. In some instances the diseases of parents reappear in the children, in others in allied diseases, and not infrequently these defects pass over and reappear in the third generation. Often such defects are dormant, and only break out from the application of some peculiar exciting cause. Thus a hysteric mother and paranic father were followed by three children. One was alcoholic, the second was a wild, impulsive temperance reformer, the third was a sad, depressed, melancholic man. In the third generation opium and alcoholic inebriety, insanity, pauperism, also feebleness of mind and body appeared. These various forms of nerve diseases all had a neurotic diathesis as a basis, and

the different phases were the direct result of different exciting causes. These facts are numerous and well attested, and so uniform in their operation that it is entirely within the realm of possibility to predict that, from a knowledge of the diseases of the parents and the environment of the child, certain forms of degeneration and diseases will appear with almost astronomical precision. This term neurotic diathesis covers a vast unknown field of causes which extend back many generations. The evolution of brain and nerve defects can often be traced through the realms of environment, nutrition, growth, and development. Medical text-books and teaching which fail to recognize this, give very narrow conceptions and strange exaggerations of the influence and force of many insignificant and secondary factors in the production of disease. The opium-taker has often this neurotic element in his history. It may be traced back to his ancestors, or it may be associated with brain or nerve injuries, cell-starvation, faulty nutrition, auto-intoxications, brain strains, or excessive drains of nerve force. A train of predisposing causes may have been gathering for an indefinite time back. Then comes the match which kindles or fires the train of *gathering forces*. This same train of exciting causes may not explode, because the germ soil is absent. Opium in all forms is given daily, and yet only a comparatively small number of cases become addicted to its use. Why should an increasing number of persons take opium continuously for the transient relief it gives? Why should the effects of this drug become so pleasing as to demand its increased use, irrespective of all consequences? The only explanation is the presence of a neurotic diathesis, either inherited or acquired. The existence of a special opium diathesis has been doubted with supercilious contempt by many writers. Any clinical study of cases will show the error of such doubt. The notes of a few cases which have recently come under observation are illustrations by no means uncommon, and indicate the concealed factors of disease in many instances:

In Case 1 the mother was a secret morphine-taker, the father was a hypochondriac and melancholy clergyman. Two children followed, who were highly educated and healthy. One, a boy became a physician, and at thirty suddenly began to use morphine and soon became a chronic case. The other,

a girl was well up to her marriage at twenty-four, when she began to use opium for no apparent reason.

Case 2, reported by the late Dr. Parrish. Both parents used opium for sleep and neuralgia, and died leaving three children under five years of age. They were brought up in temperate families, and had no knowledge of the opium addiction of their parents. One, at twenty, continued the use of morphine, after it had been given for some intestinal trouble. The second child suffered from dysmenorrhoea and began to take morphine for this trouble, and became a morphine maniac. The third child was a druggist, who at thirty was a confirmed opium-taker.

Case 3. Both parents were neurotic, and probably opium-takers. Both died leaving an infant child which was excessively irritable and peevish. By accident, morphine was used as a remedy, and from thenceforth the child would become delirious unless morphine was given daily. All efforts to break up its use failed, and for five years increasing doses were used constantly until the child's death.

In Case 4 five children of unknown parentage were all opium-takers, all lived in different conditions and had different occupations. Two began the use of opium from some bowel trouble. Two have been under treatment, and relapsed (?).

The relief which this drug brings on all occasions, and its impulsive use, are unmistakable indications of a distinct opium diathesis. I believe a careful clinical study will reveal many such instances.

There is a large class of opium cases in which a complex diathesis exists—particularly following inebriety and various forms of brain exhaustion. Often alcoholics will use opium irregularly and transmit to their descendants a diathesis which very commonly favors the use of this drug. Thus the alcohol diathesis frequently becomes the opium craze, with but slight exposure. Both of these disorders are rapidly interchangeable. The children of opium-takers may turn to alcohol for relief, and *vice versa*. It is clear that the moderate use of alcohol produces a degree of degeneration that frequently appears in the next generation as predisposing causes to the opium or allied diseases. Clinical study of cases brings ample confirmation of this. The children of both alcohol and

opium inebriates display many forms of brain degeneration. The paranæics, criminals, prostitutes, paupers, and the army of defects, all build up a diathesis and favoring soil for the opium craze. Descendants from such parents will always be markedly defective. They are noted by brain and nerve instability, hyperæsthesia, and tendency to exhaustion; also extreme pain from every degree of functional disturbance, with low powers of restoration, inability to bear pain, and suffering from mental changeability, impulsiveness and drug credulity, etc.

These characteristics are prominent and mark a neurosis that quickly merges into the opium disease. Yet a minority of these cases show a sensitiveness in the effects of opium that prevents them from using it. I have seen a neurotic patient become dangerously narcotized by the use of half a grain of solid opium. Some of the alcoholics and other narcomaniacs have exhibited an incompatibility to opium that is often startling. The emesis and prostration, and the brain stimulation which approaches and becomes hyperæmia from one or more doses, are familiar to all. This intolerance precludes the use of the drug and is recognized with alarm by the patient. On the other hand, when the effects are rapid and marked, relieving pain or restoring the disturbance of the functions, with no other than a pleasing sense of rest and cure, a dangerous diathesis should be suspected. While the physician recognizes the constitutional incompatibility in one case, he ought not to overlook the abnormal attractiveness of the drug in the other. The dose of morphine which gives the first complete rest or calms the delirious excitement, or relieves the neuralgic pain or the digestive disturbance, soon calls for its repetition, and many physicians will unconsciously sanction and advise its use. Thus, far more fatal conditions are cultivated and roused into activity. In all neurotic cases, the use of opium in any form when given, should be concealed and watched with care. If a special predilection for this drug appears equal care and skill should be exercised to divert and change it. Opium should only be used from a knowledge of the nature and character of the case. I have seen the most disastrous results from the reckless use of morphine with the needle. Recently, a man to whom morphine was intolerant was cut and stunned by a falling plank in the

street. The surgeon gave him a hypodermic of morphine and ordered him to the hospital. He died in a short time from opium neurosis. Police surgeons often make this mistake, giving morphine that from some unknown reason becomes fatal.

There is another class of opium-takers in which abnormal nutrition seems to be the most active factor in the causation. The neurotic or opium diathesis is not apparently present, and opium-taking dates from some nutrient disturbance. Such cases are very commonly sufferers from dyspepsia, derangement of the liver and bowels. They have a deranged appetite, headaches, cramps, thirst, and fever at times, with nausea. They are anæmic and hyperæsthetic, and complain of varied pains and neuralgias. These cases are evidently ill nourished, and in all probability, suffer from imperfect digestion, assimilation, and elimination of food-products and waste material. Poisonous compounds and auto-intoxications form sources of serious trouble. The brain suffers from fatigue and pain, the cells are imperfectly nourished, and congestions, complex neuralgias, nerve irritation and instability follow. For this condition opium is almost a specific paralyzant. These cases are found among the over-fed, the under-fed, and those who neglect common hygienic rules of living. Cases of the over-fed are generally epicures, gormands, and persons living sedentary lives, and eating at all times and places. Dyspepsia and derangement of the bowels and kidneys make them drug-takers; then follows opium in some form. Defective elimination and auto-intoxication are always present. The under-fed are usually misers or persons very poor and very neglectful of themselves, or paranæics who have some food delusion. They are practically suffering from cell and tissue starvation and nutrient debility. The same dyspepsia and bowel derangements follow. Then follows drug-taking or special foods, and soon opium is discovered and adopted as a remedy. The same poisonous waste-products appear from deranged assimilation; also, elimination and the nerve centres are deranged by these new and dangerous chemical compounds. The class of persons who, from simple neglect, become diseased are often the very poor and ignorant, or some division of the great army of border-liners, who live both mentally and physically on the very frontiers of sanity and insanity. Such persons clearly suffer from many and

various forms of auto-intoxications, and this is proven inductively by the result of eliminative treatment. In all of these cases of nutrient neglect, many favoring conditions encourage the use of opium. The cases are numerous and comprise a large part of the invalids, hypochondriacs, and chronic drug-takers who are seen in our offices and at the dispensaries. They are all practically suffering from faulty assimilations, and faulty eliminations and the irritation of retained poisonous compounds. Opium is a remedy of positive force in covering up the protests of the defective cells and irritable nerves. Often these cases are concealed and are partly the result of previous disorder, and partially acquired from the effects of opium.

Next to this class of nutrient sufferers who become opium-takers, are those who have some entailment of disease or injury. In their history it will appear that some stage of invalidism was present, dating from brain, nerve or bodily injury. Fevers, heat, or sunstrokes, brain shocks from any source which are followed by unconsciousness, or marked mental perturbations, with exhaustion, and also a profound lowering of all the vital forces. These and other events have left damaged functional and organic activities, manifest in various neuralgias and physical disturbances.

The use of opium conceals and covers up this trouble. Many veterans of the late war have become opium maniacs for the relief of their pains and sufferings, and this is often concealed where it might possibly peril the procuring of a pension. The pension bureau should recognize the use of opium as a natural sequence and entailment following the disease and injury in the service. In Prussia, both alcohol and opium inebriety are treated as diseases when occurring in the army or civil service. The suffering and hardships growing out of the war has been the exciting cause of a great many opium cases. Many persons who have no special nerve diathesis in their history, after some severe illness, injury or mental strain, exhibit a degree of nerve instability and feebleness that is significant of serious organic change. Such persons manifest perversions of taste, with delusions of foods and medicines, and are on the border-lines of narcomania, ready to use any food or drugs which will bring even transient relief. The use of opium is always perilous. Why all these

and similar cases do not become opium-takers is owing to the absence of some diathesis inherited or acquired.

We can see some of the many complex causes favoring brain and nerve strain, with rapid exhaustion and degeneration, and the interchangeability of nerve diseases, in which the use of opium is only another form of the same disease. But we cannot yet trace the early causes and cell-conditions which develop the opium craze. This morbid impulse, like the delirious thirst for water on a desert plain, completely dominates all reason and so-called will power, and every consideration of life and surroundings. It is more than an accident, more than a failure to reason and act wisely; it is a disease, an organized march of dissolution. The demand for opium is only a symptom; the removal of opium is not the cure. Some central brain degeneration has begun and is going on. Narcomania, a morbid thirst for any solids or fluids that will produce neurosis, is the general name, and opium mania is only one member of this family.

In this study the fact is emphasized that the opium disease appears most frequently in persons who have a neurotic and opium diathesis, and also in persons who are suffering from nutrient disturbances, and those who are invalids or have some entailment of previous disease and injury; also that certain diseases and symptoms seem to furnish favoring soils for its growth and development. While these are but faint outlines of many unknown facts, they are urged as starting points from which to base other and more accurate studies. The medical treatment from this point of view is very suggestive. Obviously the removal of the opium is not the cure. The various methods of removal detailed with great exactness, as if they would apply to each case, are unfortunate reflections of the failure of the writers, and are based on the assumption that all cases are the same, and the removal of opium is the great essential in the treatment. Basing the treatment on the clinical study of the case, it will be evident that where an opium diathesis exists, the withdrawal of opium should be very gradual. The treatment and surroundings should be arranged with great care and exactness. Such persons should live in an institution for years, or be under constant medical care. The danger of relapse and the future of such cases will depend entirely on the conditions of life and

surroundings. Rapid reduction and any heroic treatment is never permanent, even with the consent of the patient. Specifics, faith cures, or any measures that promise speedy cures, are failures from the beginning. The road back to approximate health is straight and narrow, and only along lines of applied science. Where the history of a *neurotic diathesis* is present the withdrawal of the opium should be equally slow.

More attention must be paid to the brain and nerve nutrition. The removal of opium may be followed by the appearance of very serious disorders, such as epilepsy, hysteria, complex neuralgias and paranæic phases, alcoholism, and various other neuroses. The slow withdrawal of opium enables one to discover and anticipate these neurotic troubles which have been masked before. In one case, suicidal melancholy; in another, hyperæmia of the brain, with delusions; in the third, irritation and delirium; in the fourth, hysterical spasms appeared when the opium was removed. I have seen two cases of general paralysis suddenly spring into great activity, after the opium was taken away. This condition was not suspected before. Alcoholism is a very common sequel after the removal of the opium. *Cocaine*, *chloral*, and almost every drug that has narcotic properties are also very common entailments. While these are extreme cases, they are likely to be formed at any time. Great care should be exercised in using other narcotics to lessen the irritation from the withdrawal of this drug. Foods and tonics should be given. These cases require the same general treatment as neurasthenia and other states of brain exhaustion. They are drug-takers and will resort to anything for relief. They are secretive, and require more care and more mental remedies, with long, exact, hygienic surroundings.

Where the opium addiction has apparently come from bad nutrition and faulty elimination, with auto-intoxication, the treatment is very hopeful. A long preliminary course of baths, mineral waters and tonics should precede the removal of opium. Then the opium may be removed at once, without the knowledge of the patient. In proper surroundings with frequent baths, little danger of relapse or suffering will follow. Careful study and treatment of nutrition and digestion will fully restore the case, and relapse seldom occurs except from failure or neglect of the surroundings.

In the last class, where opium is taken and apparently follows from the entailment of some injury or disease, or the exhaustion of old age, a preliminary period of treatment seems to be required. Often the opium can be abandoned at once for some milder narcotic, and from this, by gradations, discontinued entirely. Full knowledge of the diseased states present will always suggest the lines of treatment. In some cases the opium should not be removed; its diminution and concealment is required. In others, its rapid removal is essential. Many varied and difficult questions will appear in these cases. The more accurately the diseased states, also predisposing and exciting causes, the diathesis, and varied influences which have caused opium to be used, are studied, the more accurate the treatment. As in many other diseases, the causes may be anticipated, also neutralized and prevented. Opium-taking should be seen as a symptom; remove or break up the cause, and this symptom disappears.

Routine treatment, either by slow or rapid reduction of the opium, is not wise. The substitution of other narcotics is equally unwise. In a certain number of cases the withdrawal of opium only unmasks more serious diseases, and is positively wrong. A case of general paresis is now under treatment for the opium addiction. Before this opium addiction began the patient caused great distress by his delusions and extravagantly strange conduct. This treatment is wrong. A rheumatic woman of seventy is going through the same course to be free from opium, which has made life tolerable for ten years past. The treatment of opium mania is something more than the application of means and remedies for withdrawal of the drug with the least suffering. The symptomatology and organic lesions often date back to other causes more complex than opium. The treatment must begin by their removal. The general or special diathesis must be treated; the nutritive disorders, intoxications, and starvations must be recognized and removed. The influence of pathological states from previous disease and injury must be ascertained and treated. The power of environment, climate, occupation, and idiosyncrasies are also powerful factors to be considered.

These are the essential facts and conditions which must enter into the practical treatment. Among the many important problems, that of prevention promises the greatest possi-

bilities. A recognition of the neurotic diathesis and other predisposing causes would enable the physician to successfully guard against its approach.

The successful *stamping* out of both this and the alcoholic disease will be a reality in the future.

It is evident that the opium disease is still an undiscovered country, and the few student experts have not yet passed beyond its frontiers. This disease is all about us and may invade our homes and firesides any time, and *hence* demands recognition and most careful study; above all, ethical and moral levels. Its laws of growth, development, treatment, and curability all follow the great highway of evolution and dissolution.

ENDARTERITIS PROLIFERANS CHRONICA, being an abstract of a lecture, delivered at the New York Post-Graduate Medical School and Hospital, on Nov. 23, 1891. By REYNOLD W. WILCOX, M.A., M.D., Professor of Clinical Medicine. Reported by George Jacobs Dirkes, M.D., Clinical Assistant.

Endarteritis Proliferans Chronica is a condition which is not treated of in the text-books, not generally understood, and less often recognized. It consists of a chronic inflammation of the arteries and arterioles, sometimes of the capillaries and occasionally of the veins, with a resultant proliferation of the intima. The disease has been recognized in all parts of the body, and may be localized or diffused through many tissues and organs. The lesion, however, is generally more pronounced in some one or two organs, and the interference in function or functions will serve to locate the disease and at the same time to give it a name to-wit, chronic cerebral endarteritis, chronic renal endarteritis, *et cetera*. Chronic endarteritis proliferans occurs at all ages. The earliest recorded case is that of an infant five months of age, though it is most commonly met with after fifty (Meigs.).

SYMPTOMS AND DIAGNOSIS: Hæmorrhage in some form is usually the first symptom. It occurs either as an attack of epistaxis, cerebral apoplexy, or as in a case under my own observation, and which is here to-day a retinal extravasation. These should call attention to the vascular system as do the additional symptoms œdema and vertigo. Many manifest functional disturbance of the heart, and later in the

progress of the disease, physical signs of valvular change. To connect all cases of cardiac disease with rheumatism or chorea has long been unsatisfactory, as it frequently occurred without the history of previous attacks of these affections. The following case will illustrate: A patient was examined for cardiac disease three years ago with negative result, yet at present has indisputable evidence of a valvular lesion, and in the meantime has had no acute illness. With this are the signs dependant on the changes in the blood-vessels—stiffened arteries, general aging, loss of muscular power, albumin and casts in the urine and great nervousness. The only reasonable explanation of the above phenomena is that the inflammation first appeared in the arteries and slowly advanced toward the heart until it attacked the valves and there wrought its mischief.

That the process may have its origin in an endocarditis and from this as a starting point advance through many channels is shown by the following case: A patient suffered from an attack of rheumatism which damaged the endocardium and valves. He did not regain health but gradually failed and subsequently died with all the symptoms suggestive of Bright's disease. This case was undoubtedly one of primary acute endocarditis of rheumatic origin, the inflammatory process assuming a chronic character, and spreading itself to most of the arteries in the body—for on autopsy the bloodvessels of the spleen and lungs were found thickened, the liver the seat of granular degeneration, the aorta atheromatous, and heart showed fibrous degeneration. There were also found the pathological lesions of Bright's disease.

The lungs are often the first organs to call attention to the arterial condition. It may appear as a bronchitis with or without rales, or as a chronic catarrhal pneumonia, as an acute illness or so slowly and gradually that they excite no attention though the lung be the seat of extensive pneumonic consolidation.

The blood-vessels of the liver and spleen are also subject to this proliferation of their intima. Vascular changes in the former organ will be manifest by disturbances in its function, but as the spleen cannot by any recognizable symptoms demonstrate, we can but speculate as to its existence.

The effects on the nervous system are shown in muscular weakness, nervousness, irritability, mental decline, sleeplessness and hyperæsthesia of the skin.

PROGNOSIS—Unfavorable so far as complete removal of the proliferated intima is concerned.

TREATMENT.—Various drugs have been used in this affection with indifferent success. Those which appear most efficacious are bichloride of mercury, carbonate of ammonia, and iodide of potash. Digitalis has been recommended in conjunction with the ammonia salt. The treatment must be prolonged and uninterrupted.

Clinical Reports.

REPORTS OF CASES OUT OF THE PATHOLOGICAL LABORATORY OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA, by D. W. MONTGOMERY, M. D., Professor of Pathology, and Clinician for Diseases of the Skin.

Femoral Epiplocele in a Male.—Robt. E. Bunker, M.D., Physician to San Francisco Almshouse, presented to the Museum the following interesting specimen.

A. C., an Italian, died of ulcerative endocarditis in the San Francisco Almshouse, August 28, 1891.

During life, a circumscribed, fairly firm, but elastic tumor was situated on the anterior surface of the left thigh, over the saphenous opening. The skin was freely movable over the smooth surface of the tumor, and it was itself freely movable on the subjacent structures. There was no resonance, no impulse on coughing, and it was irreducible. He said it had existed several years, and had never caused him any pain or uneasiness. The absence of many of the signs of hernia, the rarity of femoral hernia in the male, and the frequency of lipoma in the subcutaneous tissues of the thigh, justified a diagnosis of the latter affection. An enlarged lymphatic nodule, or a soft fibroma might give rise to the same physical signs. And sometimes there is an overgrowth of the subserous fat in the neighborhood of the femoral and inguinal canals, which may be mistaken for a hernia, and individuals

have been recommended to wear, and have actually worn, trusses for fatty tumors of this character.*

On cutting down on the tumor in this case, at the post-mortem, it was found to be an epiplocele, which could be fairly easily reduced by pulling on the omentum. It is not to be inferred however, that it could be so easily pulled back before death, for during life, there is more blood in the incarcerated portion, and the surrounding tissues are more tense.

On holding up the omentum, it could be seen that the incarcerated portion contained a notable increase of fat, and that there was some condensation of the tissues where the neck of the sack had grasped. This local increase of adipose tissue from circulatory disturbance has received the name of capsular lipoma from Virchow.

Capsular lipomas may occur in many situations; they cause an overgrowth of the appendices epiploicæ of the colon, giving rise to lipoma arborescens in syphilitic disease of the rectum, and a similar form of tumor owes its origin to increase of fat in the synovial fringes of the joints in rheumatoid arthritis. In cases of stone in the pelvis of the kidney, and also in hydronephrosis, the irritation is accompanied at times by an immense increase of the peri-renal fat, which may present a serious obstacle to an operator. In cases of scirrhus of the mamma, after removal of the gland, it is sometimes difficult to locate the tumor, on account of the increase of adipose tissue around it. Capsular lipoma also constitutes one of the varieties of fatty heart, and causes, in part, the bulging of the eye in exophthalmic goitre, and they are also known to occur on the shoulders of porters, from the pressure of heavy weights. "In a child's cheek there are a pair of fatty tumors lying in between the masseter and buccinator muscles; they are believed to exercise a function in distributing atmospheric pressure, and preventing the cheeks from being drawn in between the alveolar arches in the act of sucking, they are therefore called 'sucking cushions.' These pads are said occasionally to enlarge in adults; for instance in a case reported by Paul Berger, with a large calculus impacted in Steno's duct." This was also an instance of a fat tumor developing in consequence of the irritation of a calculus.*

* J. Bland Sutton, F. R. C. S., Remarks on Fatty Tumors. *British Medical Journal*. April 19, 1890.

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THE MODERN MEDICAL STUDENT.

Amid the cry for higher medical education the medical student stands stolid and apparently entirely indifferent to the general interest and excitement he is creating. The various perturbations of the medical profession do not seem to have any existence for him and he continues his wild and reckless career oblivious of the tender object of solicitude he has become. To him it is a matter of the greatest indifference whether State Boards fulminate ukases or not, providing that when he graduates he can obtain a license to practice. In fact, the entire aim and object of the medical student seems to be to remain in college the shortest length of time possible, to pass his examinations, and obtain a diploma. Beyond this he does not seek. He little cares whom his teachers are, what his alma mater is, or what he acquires providing that he obtains the diploma. This he must have or his ambition to practice medicine will meet with a serious drawback. Armed with the instrument, he has all that is necessary to constitute him a legalized practitioner of medicine whether he possesses the ability or not. This is one of the reasons that short-term colleges are so successful in the point of numerous attendance, and another point not to be overlooked is ease in passing examinations.

A strange anomaly is that which is daily observed—the student passes a more or less perfunctory examination and is

then dubbed a "doctor" of medicine. He is known thereafter as a learned man for that is what the title implies and he forthwith sees to it that he is always designated in this manner. How must it sound to the ears of the individual of liberal education to hear the words uttered and see the sentences written by many of these well-meaning but incompletely equipped disciples of Æsculapius.

The medical student of to-day is the doctor of to-morrow. Into his hands are to be committed the health, the life, and oftentimes the happiness of large numbers of individual members of the community. His mission is destined to be one most potent in the molding of his contemporaneous and succeeding generation. His apprenticeship is intended to lead him to a full appreciation of the future onerous duties which will fall to his lot; and, yet, how often is it that we can perceive a full appreciation of this as exhibited in the work, earnestness, or demeanor of the average medical student? We do not mean to imply that he should be grave beyond his years, that he should be serious beyond his surroundings, nor that he should be divested of the animal spirits inherent in youth. Far from it. But we do mean to say that there are some faults, too common unfortunately, which should be curbed and which but too often are made to obtrude themselves. All students are not affected in the same manner; but, on the other hand, every class has a certain number who seem to glory in their bad qualities and meet with approbation at the hands of those who would not be guilty of the same course of conduct.

We have recently noted a few examples which were not confined to one school or one city. One great fault has been the precipitate action of pupils in endeavoring to tell their instructors what to do. Students have endeavored to lay down laws for faculties and as was fitting they were promptly sat down upon. This seems to be one of the prominent traits of the average dissatisfied student—the desire to meddle in affairs which do not directly concern him. It is a custom which is of the most reprehensible kind and which requires prompt and decisive action for its suppression; a course we are pleased to see which is generally adopted.

Another great fault, and one which may be partly condoned, is the want not of respect but of ordinary courtesy which students frequently exhibit toward their professors. It

is indeed deplorable when a medical college must be converted into a kindergarten of good manners and it augurs badly for the politeness of the future doctor when he shows such a total lack of it in his student days.

Another fault, vice we were going to call it, is the marked inattention frequently paid to a lecturer. While this is most frequently due to thoughtlessness on the part of the student, or to the superior attractiveness of something else, it is none the less a discourtesy which is often resented and which sometimes disconcerts the speaker, thus making him appear at a disadvantage when he really does not deserve it. We know that the best and most interesting speakers cannot always hold an audience especially if it has been sitting on hard benches for several hours in succession, yet all cannot speak when the students are fresh for the fray and surely the tedium is one which can be easily borne and even forgotten by an interested listener.

We will not dilate upon other matters which display equally bad taste. The student must have relaxation and deserves it and is entitled to it. But, it must not be of such a nature as to be a positive detriment to the gentlemen who act in the capacity of instructors or an odium to the school which harbors them. Amusement and manliness do not clash with each other in any respect. To be mischievous and meddling, to work harm to others, to foment dissension, to nurse grievances, and to be impolite are the attributes of neither the man, the gentleman, nor the physician and this is what every graduate in medicine should be and this is what his diploma guarantees him to be.

Such is a brief outline of the disease. The remedy is at hand. It lies entirely with the faculty of the college collectively and individually. Undue harshness like undue leniency is ineffectual. A firm hand, and gentle withal, like that which handles the bistoury is the best. Some teachers have the felicitous power of being able to attract, of being courteous and good-natured, of being earnest, and of being manly. They never have cause for complaint and, if anything goes wrong, a simple wish to that effect is followed by prompt and cheerful rectification. But we will not follow the subject save to state that the means are sufficiently obvious whereby mutual respect and esteem may be fostered and encouraged by student and professor alike.

EDITORIAL NOTES.

LEGISLATION to prevent drunkenness among physicians is discussed in the following manner by the *Brooklyn Medical Journal*: It will doubtless be remembered by our readers that the legislature of Georgia recently passed a bill to punish with a fine physicians or prescription clerks "who may become drunk while they are offering their professional services to the public or in actual service." In vetoing this bill the Governor expresses his hearty concurrence in any legislation which would prevent such persons from practicing either medicine or pharmacy, but sees no reason why they should be fined to the exclusion of others whose duties may be important and responsible.

We believe that drunkards, or even those who, although not deserving of this appellation, shall allow themselves occasionally to become degraded to a state lower than the beasts, should be deprived of the right to assume any responsibility in which the life, the rights or the welfare of others is at stake, and the principle should be carried beyond the learned and other professions, and acted on in a broad and comprehensive manner. A physician whose moral nature is so far perverted as to allow him to assume the duties of his profession when in a state of intoxication would not be much affected by a fine.

THE DOCTOR IN OBSTETRICS is a subject which is considered by the *Southern California Practitioner*. It goes on to say: "There is rarely any need of a physician in an obstetrical case; both mother and child would get along just as well, if no better, if the meddlesome doctors would stay at home. Child-bearing is a physiological process—other animals and the lower grade of human beings perform the act unaided. Our grandmothers frequently had twelve children, seldom had a doctor, used to get up on the second or third day and tend to the wants of the family. In these modern times the doctors sometimes infect their patients with puerperal fever or in their hurry injure child or mother with forceps."

Such remarks as the above are by no means uncommon and there is enough of truth in them to make them dangerous. No doubt but that many deaths occur yearly, and

many lives are rendered miserable, from subinvolution, torn cervixes, and ruptured perineums, all of which death and suffering might have been saved with proper medical attendance, which the prevalence of such notions precluded.

Incompetent practitioners, not all of them on the illegal list either, by their dirty and meddlesome midwifery occasion, and in the minds of some justify, such talk. Thoughtless and too sweeping criticisms by some members of good standing in the profession to the effect that doctors do more harm than good are eagerly listened to by the penurious. A doctor's fee looks very large and might be used to defray the necessary expenses of life, it might be needed to pay the veterinary surgeon if the horse or cow should be sick, it would buy a large amount of tobacco, and pay for all the beer which that part of the family upon which none of the burdens of child-bearing falls could use in a year. Such men have enough sense to care for their horses but not enough "horse sense" to care for their wives.

It is the physician's duty not to save life alone but to preserve the health as well. Both life and health are in jeopardy during pregnancy, labor and the puerperium—even though they are "physiological processes;" and it is well that the croakers be occasionally reminded of the fact. No matter how healthy the woman or how normal the pregnancy, no one can guarantee there may not be a complication in labor which will demand, if not baffle, all the skill that an educated physician can give.

THE CAREER OF MEDICAL GRADUATES is a subject of interest to all of us and the following from the *North American Practitioner*, although rather lengthy contains much food for thought. As the season is at hand for the annual irruption of ambitious young men into the medical profession, the question as to what ultimately becomes of them is not without interest. A partial answer to this is found in the *Medical Age*, in which a correspondent says:

"I have endeavored to keep track of 100 of my medical friends after graduation, especially of what they did during the first five years, and find nearly seventy-five per cent. had to resort to other employment to make a living. Twenty-three received a salary either in addition to practice or separate therefrom. Fifteen were proprietors of drug stores. Three were insurance agents. Four

loaned money. One sold real estate. Three were connected with medical journals. One was an agent for drugs. One for books. One preached. One was in the patent medicine business. Two were farmers. One a manufacturer. Two gave massage treatment. One sawed wood, and subsequently suicided. Twelve gave up in disgust, and one never tried practice at all. Twenty-nine graduates only in one hundred exclusively devoted themselves to medicine, and of these eleven associated themselves with other practitioners, and in many cases fell heir to their practice."

Some statistics collected by Sir James Paget and Mr. George Field, the Dean of the Medical School of St. Mary's Hospital, are equally interesting and deal with a far larger number of students.

The former carefully traced out the careers of 1,000 students at St. Bartholomew's Hospital. "Of these twenty-three achieved distinguished success, holding important public and hospital appointments or gaining leading practices. Sixty-six had considerable success, holding good appointments or lucrative practice in good districts or gaining more than ordinary esteem and influence in society. Fair success was attained by 507 who were able to live by their profession or gain promotion in ordinary appointments, maintaining, in all cases, a good reputation. One hundred and twenty-four had very limited success, not having made a fair practice within fifteen years after entering the profession, or appearing likely to do so; or were only just making an uncertain livelihood, or were still employed as assistants in ordinary practice or were erratic or doing much less than had been expected of them.

Fifty-six failed entirely; sixteen did not get on in life, though no reason could be assigned to account for their failure; and ten failed through some distinct misadventure, or through ill health; ten were habitually irregular, and five failed because of scandalous misconduct; fifteen were never able to pass examinations, some because of idleness and listlessness; a very few through sheer want of intellect.

Ninety-six left the profession after beginning either its study or its practice, in the same space of time only seven entered after abandoning other studies or callings, a tolerably clear proof that medicine is not a profession to adopt as a change or last resort, a fact that certainly does not apply to several other vocations. Of these ninety-six three were re-

moved by their friends, thirteen left of their own accord or were expelled, two obtained independent means, four after beginning practice had to leave in disgrace, three took to the stage, one with success; four gained commissions in the army, three enlisted, one of these winning a commission; one took successfully to the bar, seven took holy orders, twenty went into business, nine became farmers, three homœopaths (all unsuccessful), twenty-four left for various other pursuits.

Eighty-seven died after beginning practice, twenty-one of diseases incurred in their duties, five by suicide, and one judicially attaining a terrible notoriety nearly thirty years since by his crimes; the remainder died when students, seventeen of phthisis, four at least of fever, caught in the hospital, and two committed suicide.

Mr. George P. Field of St. Mary's Hospital Medical School, the youngest in London, announced some two or three years ago that 1,000 students had joined the school, of these 284 were still studying, leaving 716. Of these, seventeen left the profession, 171 were lost sight of (probably either left the profession or died), sixty-four were known to be dead, and twelve failed entirely. Hence, there were 453 left in practice, of whom 371 were in general practice, and thirty-four of the 716, or less than five per cent, had achieved distinguished success. These statistics of Mr. Field extended over some thirty years.

"From these statistics," as a cotemporary remarks, "we glean just what might be expected, viz.: "That a large proportion of those who enter on the practice of the profession manage to make a little money or at least pay their way; that a very select few achieve fame (and still fewer fortune) that a few, not many, render themselves infamous, and that a considerable number become the victims of casualties."

And still they come!

The Frog and the Physiologist.—In his Christmas lectures at the Royal Institution in London, Professor McKendrick spoke of the services which frogs have rendered to the cause of physiology, and suggested that a statue of a frog be erected as an acknowledgment of the many benefits which the race of frogs have indirectly conferred upon the human race.

Microscopy.

The Fuchsinophile Plastidules, or Bioblasts of Altmann. II.—Technique.¹—Altmann speaks only of observations made on vertebrates and on the muscular fibres of *Dytiscus*.² Our own researches have been made upon various types of animal life with the view of determining, if possible, the presence of bioblasts or plastidules, and other facts which confirm their vital activity, restraining our observations to the somatoblasts of Altmann (the plastidules of cytoplasm). The mode of research adopted by us was identical with that of Altmann, viz: Fixation of the sections or fragments by means of an osmio-bichromic mixture, staining with acid fuchsin, and differential bleaching with picric acid.³

Altmann advises the use of absolutely fresh material. The examination of tissues where the creatures were put into the fixing solution, alive or just killed, gives by far the most reliable results; though it is nevertheless true that the examination of tissues relatively long after death, even twenty-four hours afterward, yields valuable results not only as to the presence, but even as to the disposition of the plastidules. In the tissues of the human body these have been observed, even sixty hours after death. The technique is as follows:

1°. The little fragments to be studied are fixed by leaving them for twenty-four hours in a mixture of equal parts of a five per cent. solution of pure bichromate of potassium and of two per cent. solution of osmic acid in distilled water.

2°. Wash in distilled water and let them lie in the same for an equal length of time.

3°. Pass successively through alcohols of 75°, 90° and 100°.

4°. Pass the material through alcohol and xylol, xylol pure, and xylol and paraffin, and finally embed in paraffin melting at 60° C.

1. By Doctors Rafael and Luigi Zoja. Continued from the February *ST. LOUIS MEDICAL AND SURGICAL JOURNAL*.

2. THE presence of bioblasts in vegetable tissues has been demonstrated by Zimmermann.—Altmann, *Opus. cit.* p. 7.

3. ALTMANN'S method gives results in histological researches equally excellent as those attained in biology. O. Israel gave it the preference in studying the anæmic necrosis of the renal epithelia.

5°. Section. The sections should be as nearly as possible one *mikron* (one thousandth of a millimetre) thick. Those two mikrons, or over, in thickness are of little or no use.

6°. Spread over the glass slip a very thin layer of a four per cent. solution of traumaticene in chloroform. The chloroform will evaporate and the slip is then strongly heated over an alcohol flame. Let cool, and as soon as cool let fall on the slip two or three drops of the following solution of pyroxylin :

Pyroxylin.....	1 part.
Aceton.....	25 parts.

Mix and dissolve, then add five cubic centimeters of the solution to twenty cubic centimeters of absolute alcohol.

Before this solution has time to set transfer the sections to place, pressing them strongly with bibulous paper. The paraffin is now removed by xylol, which is in turn removed by absolute alcohol.

7°. Stain the sections on the slide with acid fuchsin (twenty parts of fuchsin dissolved in a saturated aqueous solution of anilin). The slip should be warmed during this process until the solution begins to give off a vapor. The time will vary from fifteen to fifty or fifty-five seconds, according to the nature of the section.

8°. Let the preparation cool off and then wash with a dilute alcoholic solution of picric acid (saturated solution of picric acid in absolute alcohol, one volume, distilled water, two volumes,) until the excess of coloring matter is removed. A few drops of the picric acid solution are dropped on the slip and warmed until differentiation is neat and clear. This is the most delicate point in the whole operation. Altmann advises putting the preparation on a stove warmed sufficiently to melt the embedding paraffin, leaving it there say, forty seconds. A few experiments will enable the operator to acquire the knack of getting the right degree of bleaching for proper differentiation. As soon as this is done, quickly wash off the picric solution with absolute alcohol, add xylol, and mount in dammar resin.

The preparations should be examined with a homogeneous immersion objective and with an amplification of not less than 500 diameters. If properly prepared the nuclei are bleached, and the plastidules show up a lively red on a honey yellow or pale red back ground. When the differentiation is insufficient,

the nuclei remaining colored and the cells having a diffused tint, the condition can be ameliorated by treating the sections, while warm with the picric acid solution, after having taken off the cover-glass, removed the dammar with xylol, and the xylol with absolute alcohol.

Altmann, in his chapter on the technique of the methods of investigation of granula, points out other methods of procedure. For fixation of the fragments he sometimes uses a solution of mercury oxide in nitric or picric acid added to formic or acetic acid. Staining is affected by a neutral solution of acid fuchsin. Differentiation is made with cold picric acid solution.

In investigation of the caryoblasts (nucleated plastidules) fixation is achieved by the osmio-bichromic solution. As an oxydant chloride of gold is used, and staining is affected by cyanine.

We (the authors) believe that the best results will be obtained by a special method of congelation not yet entirely worked out. In several special cases we have tried various modifications of Altmann's processes but with indifferent or very unsatisfactory results.

For recognizing the relative positions of the plastidules and the elements of the nucleus, particularly during the process of karyokinesis, we have found a supplementary staining with hæmatoxylin very useful. After differentiation and removal of the picric acid by absolute alcohol the preparation is left for thirty minutes in Delafield's hæmetoxylin, full strength. It is then placed into a dilute solution of the same and left for a much longer time, the slow action of which brings out the characteristic coloration of the plastidules. Wash rapidly feebly alkaline distilled water, and afterward with absolute alcohol and mount in xylol-dammar.

In the narration of our investigations and discoveries we shall speak only of those which seem to us of great interest, and shall leave to one side all those operations in the domain of histology made with the view of determining the presence of generic plastidules. In our next we will take up the protists (bacteria, lobates, flagellates, etc.).

A New Construction for Compound Microscopes.—
In the *Zeitschrift fuer Wissenschaftliche Mikroskopie* for December 22, Dr. Adolph Lendl, docent at the Polytechnic school

in Budapest describes at length a new method of securing at once very high amplifications with perfect definition, by means of an easily applied modification in the method of construction of the draw tubes of the ordinary microscope stand. His plan is, briefly, to substitute for the eye-pieces ordinarily in use, a second microscope, consisting of eye-piece, objective, etc., of low power, so arranged within the tube that the picture hitherto observed through the eye-piece shall be seen through the second microscopic combination of lenses. Dr. Lendl had a large stand, made by Reichert, of Vienna, converted in the manner described by him and had it on exhibition during the last session of the Imperial Hungarian Natural History Society. Along side of it was one of Reichert's best stands, arranged with one of that maker's superb eye-pieces of high power, and the visiting naturalists were requested to look at the same object through both instruments. The results were startling, even more so to microscopists accustomed to the use of high powers than to those who use the instruments with comparatively low amplifications. With it Lendl was able to bring into focus a single "pearl" of *Pleurosigma angulatum*, so highly magnified that it filled the entire field, and he was thus enabled to determine that these configurations, concerning the shape of which there has been so much learned discussion, were neither hexagonal nor round, but rhombic. Reichert is now making instruments especially adapted for this kind of work, though any small microscope can easily be arranged so as to answer for an eye-piece, providing, of course, that its tube is small enough to slide inside the tube of the stand.

F. L. J.

Bequests to Public Institutions.—By the will of Anne W. Davis the sum of \$15,000 is given in trust, after the expiration of a life interest, two-thirds of the income to be paid to the Massachusetts General Hospital and one-third to the New England Hospital for Women and Children. The will of Mrs. Elizabeth B. Bowditch contains the following bequests: The Massachusetts General Hospital, \$5,000; to establish or support a home for convalescents, \$5,000, House of the Good Samaritan, \$5,000; Children's Hospital, \$3,000; Old Ladies' Home, \$3,000.

Dermatology and Genito-Urinary Diseases.

Enlarged Lymphatic Glands.—The following treatment is recommended by Tordeus (*Union Médicale*):

R	Tinct. iodini,	
	Tinct. gallæ.....	āā.....3 ij.
M.		
R	Iodini.....	gr. viiss.
	Kali iodidi.....	3 ss.
	Glycerini	3 j.
M.		

Either one of these solutions is painted over the enlarged lymphatic ganglia twice daily.

Dermatolysis of Scalp.—Mr. J. J. Lamprey reports a remarkable case of dermatolysis of the scalp associated with fibroma on the body and limbs (*Brit. Med. Jour.*) The ponderous mass of dermatolytic skin, which he observed hanging from the back and left side of the head of a negro of fifty, was estimated to weigh twelve pounds. It falls in soft folds over the left shoulder and back, is freely movable and, for convenience, is carried in a large bag fitting like a cap to the head, and supporting the growth as it rests on the spine and back of the neck. An examination of several specimens of blood for filariæ resulted negatively. Nodular masses are visible on the surface of the body, legs, arms, and face, varying in size from a small pea to a billiard ball. All are in a more or less irritable state and inclined to ulceration. The subject, who is a native of Sierra Leone, states that he was born with lumps on his skin and body.

Treatment of Condylomata.—Waldo states (*Jour. des Mal. Cut. et Syph.*) that many condylomata dissappear by the application of drying powders and, for this purpose, he prefers calomel or powdered boric acid. In some cases an astringent, such as tannic acid, may bring about a cure. Cases occasionally arise in which more radical measures must be resorted to. In the graver cases the base must be destroyed. The condylomata are excised with scissors and the base cauterized with pure carbolic or nitric acid. I prefer chromic acid

as it is an active escharotic and acts as a good hæmostatic. When the mass is very large Paquelin's thermo-cautery should be used and carefully as large hæmorrhage and extensive wounds may result. Electrolysis may be employed in recent cases. In serious cases the author looks upon the galvano-cautery as the best, among special methods, for it does not give rise to hæmorrhage or severe pain. Whatever method be employed, the cause of the condylomata should be treated or a recurrence of the growths will take place.

Excision of Anthrax.—Mr. T. Pagan Lowe is of the opinion that anthrax should always be excised (*Lancet*). He states it as his opinion that the lesion is a focus wherein the bacilli are manufactured, as it were, and that the removal of this prevents further infection. His method consists essentially in cutting wide of the limits of the lesion, being careful to remove a considerable portion of the healthy tissues underneath. The wound is then to be freely irrigated with a hot perchloride solution and then well dusted with iodoform before its edges are brought together with sutures. Two cases are given in detail as illustrative of the success of the method. From the description given and the causes (washing buffalo hide) the process described appears to be malignant pustule which some writers claim is distinct from anthrax. An examination of one specimen confirmed the diagnosis, but we are not furnished with any details concerning the bacillus which, we judge from the context, was found.

Treatment of Alopecia Areata.—As is well known the principle of treatment in alopecia areata is that of stimulation of a marked character. This method has been found to be successful and to be followed by a growth of hair on the bald spots. In a recent number of the *Jour. of Cut. and Genito-Ur. Dis.*, Dr. L. Duncan Bulkley gives a procedure adopted by him which is simple, cleanly, and affective in his experience. It consists in applying pure carbolic acid to the affected areas. A piece of cotton is wound around a tooth-pick and the area is at first lightly touched with the cotton which has been saturated with ninety-five per cent. solution of carbolic acid. Then it is vigorously rubbed in for a few moments. Care should be taken not to apply it to a surface of more than two and one-half square inches at one sitting. One applica-

tion is often sufficient. If there are no results seen in two or three weeks another application is made and this is usually all that is required. Internal treatment, as a rule, is not necessary.

Malignant Precocious Syphilis.—Dr. A. Brousse records a case in the *Annales de Derm. et de Syphil.*, which possesses points of interest. The patient, a man of thirty-four with scrofulous and alcoholic antecedents, was observed to be affected with rupia twenty days after having contracted a chancre. The rupia possessed a singular tenacity for, while it is true that it seemed to give way under specific treatment it did so only temporarily and recurred as soon as treatment was suspended. In the course of two and a half years the patient had no less than six recurrences of this eruption each one of which was more grave than the last; and, all were followed by scars. One marked feature of this and similar cases is the constant danger of relapses and the gloomy prognosis which is its natural consequence. In the case reported several factors no doubt contributed to render the process malignant. The patient had a scrofulo-tubercular taint; he was an alcoholic; and he lived in abject circumstances, all factors potent in their debilitating effects and thus materially contributing to this special destructive feature. Contrary to Bassereau's dictum that a malignant chancre implies a malignant syphilis, in the case reported the chancre was genital, ordinary in appearance, and healed with great rapidity.

Vegetable Parasites.—We see in the *Provincial Medical Journal* that Dr. Raphaël Blanchard states that of the fungi which are known to be human parasites, only four are recognized as directly transmitted to us by animals:

<i>Achorion Arloingi</i>	Busquet, 1891
" <i>Schænleinii</i>	Remak, 1845
<i>Trichophyton depilans</i>	Mégum, 1878
" <i>tonsurans</i>	Malmsten, 1848

But it is also probable, although it has not been proved, that four others are, also, so transmissible:

<i>Actinomyces bovis</i>	Harz, 1877
<i>Microsporon Audouinii</i>	Gruby, 1843
<i>Lepocolla repens</i>	Eklund, 1883
<i>Aspergillus fumigatus</i>	Fresenius.

The first finds, apparently, its primary host in the mouse, then passes to the cat, and finally to ourselves, when it pro-

duces *favus vulgaris*. It was shown, however, at St. Cyr in 1877, that occasionally it is transmitted directly from mice infesting clothes afterwards worn. And in the veterinary school of that college the fungus was transplanted back again to the mouse, to the cat and to the dog.

The second form is not so readily cultivated on gelatine, and rarely passes from man to man, but that it sometimes does so has been proved by Remak and others. "The harmless necessary cat" used to be credited with conveying this fungus also, and, so, giving rise to *favus herpeticus*, but it seems rather to be the dog, or, possibly, some small rodent which is the culprit. The horse and ox may be attacked by it, as well as the rabbit and the rat, but either rarely so. Fowls, however, may be seen infected with it, but it does not, as one might expect from analogy, pass into the sheath of the feathers, but attacks the comb and wattles.

There is good evidence that the *Trichopyton depilans* can pass from oxen to human beings: A girl of Zurich, in 1820, caught the disease from a cow she had charge of, and which was suffering from *herpes tonsurans*, but in a form differing notably from ordinary ringworm.

In 1853 Bazin published his famous observation of the gendarmes who had contracted a form of ringworm from their horses which had patches of *Trichophyton tonsurans*. And in 1881 Mégum saw fifteen artillerymen, of the same battery, suffering from *herpes circinatus* (*Tinea circinata*) on the neck and chin; and it seems they had been in the habit of abstracting the horse rugs, and rolling themselves up in them to their ears at night for the sake of the warmth, and, so, taken the disease from some recently bought horses. The fungus grows readily on the hide of a calf, not so freely on that of the ox; just as children take ringworm when adults escape.

The position of the *Actinomyces bovis* is very different; it does not grow on the skin, and, as its nidus is so clearly diseased grain, with which men and animals are equally brought in contact, there is no need to invoke the question of contagion to account for its attacking both of them. The inside of the cheek and the lungs are the usual sites of the disease, but in the pig it is found in the muscles. Yet carnivorous animals feeding on their flesh are not attacked by it, nor has it been introduced by direct inoculation, except in the case of that most unfortunate and prolific of animals, the rabbit.

Baldness, not due to senile decay, has been commonly attributed to fungoid growth; but the evidence is all the other way: the highly refractive cells seen under the microscope attached to the shrivelled bulbs are resolved by æther into oil globules, and no trace of mycelium can be detected. And the fear that the disease is contagious would seem to be groundless. The author, however, clings doubtfully to the idea of its parasitic origin, and that kittens can transmit it to each other and to ourselves. It is much more probable in the former case that it is a true fungus disease, perhaps derived from other animals, and, thus, a bald girl may own a bald kitten as a coincidence, not as a cause of her depilation. O-D.

Excerpts from Russian and Polish Literature.

Europhen as a Dressing Material.—At a recent meeting of the Russian Syphilographic and Dermatological Society, Dr. Oscar Peterson, of St. Petersburg (*Vratch*, No. 2, 1892, p. 27), made a communication on the so-called "europhen"—a new substitute for iodofoem, issued and patented by a German firm (F. Bayer and Co.) Chemically it proves to be nothing else than a "isobutyl-orthokresol-iodide." It forms a fine amorphous brownish-yellow powder with a faint peculiar aromatic smell, somewhat resembling that of cedar-wood. The substance is insoluble in water or glycerine, but is easily dissolved in alcohol, ethers, chloroform and oils. To prevent its decomposition, it is advisable to keep the drug in a dark glass in some dry spot. Dr. Peterson tried europhen in twenty-five cases of circumcision, twenty of soft chancres, seven hard chancres, three ulcerating gummata, two buboes, two "follicular ulcers," and one whitlow. The results were, on the whole, very satisfactory. In cases of circumcision the wounds, after the insertion of sutures, were freely powdered with the drug and covered with sterilized gauze, cotton-wool, etc. The dressing being changed every one or two days. In twenty-two out of the twenty-five cases the wounds rapidly healed *per primam*. In the other three they re-opened, and that in two in con-

sequence of violent erections, while in one the gaping seemed to occur in connection with a supervening attack of influenza. In cases of soft chancres the ulcers, after cleansing with a piece of hygroscopic cotton-wool, were powdered with euophen from one to five times daily. In one case where the application had been preceded by scraping out the ulcers the latter healed in five days. Of the remaining nineteen, in one cicatrisation ensued in three weeks, but in the other eighteen it took place in from twelve to fifteen days. Hard chancres, gummata and whitlow similarly healed fairly quickly. The cases of buboes were treated by incision and scraping out, with subsequent powdering with euophen and application of a pressing bandage. On the removal of the latter on the seventh or ninth day the wounds were found soundly united (though in one of the cases dermatitis of the surrounding skin was observed). All in all, Dr. Peterson comes to the conclusion that euophen offers a useful substitute for iodofoem in minor surgery and in the treatment of venereal ulcers. The odor is actually very faint and, in addition, can be totally disguised by the patient carrying about in his pocket a handkerchief perfumed with some lilac (*syringa vulgaris*) essential oil. Unfortunately, the useful drug, being patented, is rather expensive.

[During a discussion *ibid.*, No. 1, p. 22), Professor I. A. Maieff related Dr. Iakimovitch's recent clinical parallel experiments with euophen and iodoform, according to which the former decidedly affords the best dressing material after iodoform. Dr. I. A. Eroff, while confirming that euophen possesses an excellent antiseptic action, has pointed out that a prolonged application of the remedy can give rise to irritation of the surrounding skin.]

The American Method of Treatment of Gall-Stones.

—In the *Nowiny Lekarskie*, December, 1891, p. 577, Dr. Wladyslaw Swiderski (pron. Vlandislav Svederskee, a Polish name), records two instructive cases of cholelithiasis in which he successfully resorted to the American method of treatment—that is to the internal use of either sweet-oil or lipanin. In one of the cases, that of a lady, aged sixty, who was seen shortly after the beginning of a severe attack of hepatic colic, olive-oil was employed, the remedy being administered, in tablespoonful doses (with a few drops of

brandy), at first three times a day, but later on every hour. The other patient, a lady of forty-five, was given lipanin in identical doses. In both, all symptoms gradually subsided. On examination of the stools in the first case they were found to contain a considerable quantity of fragments which proved to consist of cholesterine. [The fragments were picked out and thrown into ether; on evaporation of the extract characteristic crystals of cholesterine were obtained.] In the other patient the fæces contained biliary concretions in the shape of a coarse powder or gravel. [Chemical and microscopical examinations gave the same results as in the former instance.] Both of the ladies continued to take either sweet oil or lipanin (a tablespoonful, twice or three times a day) ever since; and both remained free from any signs of their old affection up to the present. [In the first case two years have elapsed since the cure]. The author emphasizes the fact that no other remedies were given in either of the cases. The oils were borne by the patients perfectly well.

Dietetic Treatment of Typhoid Fever.—At a recent meeting of the Russian Society for Protection of National Health, Dr. K. N. Püritz, of St. Petersburg (*Bolnitchnia Gazeta Botkina*, No. 46, 1891, p. 1198), read an important paper on the subject, based upon a course of careful experiments in Prof. I. T. Tchüdkovsky's clinic. A group of eight young male patients (mostly soldiers) suffering from enteric fever was placed on a strong nutritious diet, while another similar group received the ordinary restricted dietary usually adopted in cases of typhoid fever or other acute febrile affections. In each case of the former category the patient was daily supplied with 160 grammes of proteids, 100 of fats and 300 of carbohydrates, which were introduced in the form of meat-powder (twenty-five grammes with 250 cub. centimetres of beef-tea, in the morning and evening), boiled milk (two and one-half litres), finely-minced cutlets and boiled meat, bread or English biscuits. Besides he was daily receiving from sixty to ninety cub. cc. of good wine and thirty of brandy, as well as tea, coffee, lemonade and *mors* (a sour beverage prepared of cranberries—a national Russian drink), the latter four being allowed *ad lib.* All the patients experimented upon were taking a full bath at 28° Reaum. of from fifteen to thirty minutes' duration, twice daily, but no drugs whatever were

administered in any of the cases. The results obtained from Dr. Püritz's comparative experiments are certainly highly instructive. They may be summed up somewhat as follows: 1°. Though in both of the series the patient's bodily weight continue to steadily sink up to the advent of defervescence, in the case of an increased alimentation the daily losses are invariably less (on an average of from sixty to eighty grammes) than in that of a restricted dietary. 2°. In the former case the assimilation of nitrogen is better than in the latter—in fact differs but slightly from that under normal conditions. 3°. In the case of an increased alimentation the oxidation of systemic nitrogenous substances is comparatively somewhat increased, but the daily losses of nitrogen are twenty-five per cent. less than in the case of a restricted dietary. 4°. An increased alimentation produces a strikingly favorable influence on the work and symptoms of the disease. The patient's subjective state is improved most distinctly. *Status Typhosus* is pronounced but slightly. The cardiac action remains excellent all through. The stools become regular. Recovery proceeds unusually (*něobytrhaino*) rapidly and steadily (nor elapse, etc.). 5°. All the facts above fully justify the conclusion that an increased alimentation constitutes a most powerful means for the treatment of typhoid fever, or, indeed, any acute febrile disease.

In the course of a discussion (*Ibid* p. 1200), Prof. Tchüd-novaky stated that, about ten-years ago, during an extensive and severe epidemic of typhus fever amongst under-paid, ill-fed and exhausted workingmen, he solved ultimately to try a liberal feeding before adopting any proper medical means. The results were brilliant. Intestinal disturbances and typhoid state rapidly subsided, the duration of the disease shortened, the percentage of deaths lessened, and so on.

In the *Vratch*, No. 46, 1891, p. 1050, Prof. V. A. Manassein, (who, by the way, was the first to prove by clinical experiments that typhoid patients can assimilate food just as well as healthy subjects), points out that in his clinic a possibly liberal alimentation of typhoid patients has been a matter of daily routine for many years past.

On thinking about the subject, one cannot help experiencing an unspeakably bitter sensation. It is only too well

known to the whole civilized world, fearful what ever extending epidemics of typhus and typhoid fevers which are now ravaging in some of the famine-stricken regions of Russia (especially in the Kazan, Perm, and Simbirsk governments). Our Zemsky medical men make almost superhuman efforts in their truly heroic struggle with the pestilence, trying hard to save the ill and to prevent a further spread of the diseases, and falling one by one victims to their noble professional duty. But, unfortunately, all their efforts and self-sacrifice have yet remained vain, since the heroic doctors have no sufficient financial means at their disposal and are even troubled to place their patients on a "restricted diet," not to speak of anything like the so beneficial "liberal alimentation." True, a couple of months ago, Prof. V. A. Manassein, the founder and editor of the *Vratch*, and the illustrious leader of the Russian medical profession—starting from the axiom that the "best (*surest, safest, quickest and most effective*) way for the distribution of food articles etc., in the famine regions, is that of distributing them through the *Zemsky* doctor"—opened a special subscription for the purpose and ever since has been enabled to weekly mail the sums collected from week to week *directly* to this or that *Zemsky* practitioner. But all such contributions from humane and sensible doctors (mostly from our medical brethren) have been up to the present desperately trifling in comparison with the formidable dimensions of the battle-field of starvation and disease. The dimensions which, however, appalling at the moment, will become, undoubtedly, still more so with the advent of the warmer spring season.

Sincerely believing and hoping that some of our American medical brethren might feel a desire to actively help the brave phalanx of the *Zemsky* doctors of the famine regions, we may add that the money should be addressed as follows:

To Professor Dr. V. A. Manassein, 12, Simbirskaja, 12, St. Petersburg.

It is hardly necessary to mention that the receipt of every cent is immediately duly acknowledged in the *Vratch*.—*Reporter*.]

VALERIUS IDELSON, M. D.

Berne, Switzerland.

A Young Woman in New York City has become insane from the administration of gas for the extraction of teeth.

Medical Progress.

THERAPEUTICS.

Strontium Lactate in Albuminuria.—The salts of Strontium are among the most recent additions to the unofficial pharmacopœia and the discovery of their therapeutical applications, constitutes a distinct step in advance.

The bromide of strontium has been shown to be in every respect an efficient and reliable substitute for bromide of potassium, over which it possesses the unquestionable advantage of being better tolerated, while the lactate of strontium (Paraf-Javal) on the other hand, has been found to exercise a favorable influence on the gastrointestinal functions, hence it is indicated in conditions of depraved nutrition. In the cause of the investigations which had for result to demonstrate the absolute innocuousness of the pure salts of strontium, Dr. Laborde, the Chief of the Physiological Laboratory of the Faculty of Medicine of Paris, had occasion to observe the remarkable influence of these salts in promoting assimilation and nutrition, and relieving obstinate and painful cases of dyspepsia associated with painful manifestations. His conclusions have since been confirmed by numerous clinical observations made by Professor Germain Sée, bearing on the value of strontium salts in affections of the stomach, in the treatment of which he considers them far superior to the alkaline carbonates. This opinion is upheld by Dr. Constantin Paul, Dr. Dujardin-Beaumetz and others, who have at various times communicated the results obtained by them to the Academy of Medicine and the Society of Therapeutics, notably in respect of the action of lactate of strontium salts in conditions associated with albuminuria.

Dr. Constantin Paul testifies to the fact that the lactate is well borne even in daily doses of from eight to twelve grammes (120 to 160 grains.). From a therapeutical point of view he employed it with advantage (1) in visceral congestion, in the treatment of which it gave better results than lithia and (2) in Bright's disease. Although lactate of strontium is in no sense a diuretic, it brings about an immediate diminution in the amount of albumen excreted and leads to a correspond-

ing improvement in the collateral symptoms and general condition of the patient. When the exhibition of strontium is suspended, the albumen reappears in the urine in some cases and disappears on the resumption of the treatment. These observations have since been confirmed by others, which show clearly enough that lactate of Strontium (Paraf-Javal) is indicated in the parynchymatous nephritis of gouty and rheumatic subjects as well as in puerperal and post-puerperal albuminuria. There is moreover every reason to believe that its influence on the renal function may be turned to good account, in the treatment of glomerular (scarlatinal) nephritis. Dr. Bucquoy, from observations of his own, found that the administration of lactate of strontium (Paraf-Javal) immediately reduced the proportion of albumen in the urine. Dr. Dujardin-Beaumetz reports having given lactate of strontium in five cases of albuminuria of various origins, nephritic, cardiac, etc. In all, within from one to four days, he succeeded in reducing the proportion of albumen fifty per cent. He concludes his report with these words, the importance of which cannot be exaggerated: *In lactate of strontium we possess an invaluable agent, the action of which is at the same time certain and inoffensive.*

Dr. Laborde in a communication to the Society of Biology (1) remarks that now that strontium salts are generally adopted in practice, he cannot too urgently insist on the necessity of their purity, if further accidents are to be avoided. Recalling his first contributions to the therapeutical uses of strontium, he stated that his physiological studies were made with absolutely pure salts, prepared specially by M. Paraf-Javal; these were also used to determine their clinical uses by Drs. G. Sée Constantin Paul, Dujardin-Beaumetz, Bucquoy, Ch. Féré and others. The authenticity of these pure salts he looked on as an essential condition of success, and he considered it important to bring it to prominent notice.

Endocarditis and Valvular Lesions.—Dr. C. R. Illingworth writes as follows to the *Satellite*: I have found, during the last four years, that the iodide of sodium, in two or three grain doses, removes cardiac valvular lesions in a remarkable manner. I give it with carbonate of ammonia, and with or without digitalis, in five to ten minim doses; and in recent or acute cases I blister or paint with strong iodine the præcordial

region during the administration. Forty cases cured. I give digitalis if the pulse-rate is at all increased beyond the normal.

Nervous Dyspepsia.—Dr. James W. Anders recommends the following (*Times and Register*):

R Strychninæ sulph.....gr. 1-36.
Acid phosphorici dil.....m. xx.
Glycerini.....3 ss.
Aque.....q. s. 3 j.

M.

Sig. At one dose, three times a day, before meals.

Nutmegs in Hæmorrhoids.—The common nutmeg employed in the form of an ointment is said (*Med. and Surg. Rep.*) to give prompt and permanent relief in itching and painful piles. It may be employed as follows:

R Pulv. nuc. moschat.....3 ij.
Acid. tannic.....3 j.
Petrolat.....3 j.

M.

Croupous Pneumonia.—The general management of this disease is thus described by Dr. Thos. J. Mays (*University Medical Magazine*): Do not disturb the patient with frequent physical examinations, unless these are absolutely necessary. Make your diagnosis, lay down your general plan of treatment at the outset, and follow out the latter with as little variation as possible. The patient must not be worried by administering food or medicines too frequently. After the nature of the local applications has been decided on, he prescribes the following:

R Phenacetin or antifebrin.....gr. lx.
Quininæ sulph.
Pulv. digitalis.....āā.....gr. xx.
Strych. sulph.....gr. ½.
Atropin. sulph.....gr. 1-30.
Morph. sulph.....gr. i.

M.

Ft. capsul. No. 20.

Sig. One capsule four times a day.

If aconite is administered it must be given in frequently repeated doses in the early stage of the disease. The albuminous juices of beef, oysters and clams, already mentioned, and the milk, may be alternated with the capsules every two hours during the daytime. Throughout the night the food is to be given at least twice, one of which times must be early in

the morning. Brandy or whisky must, of course, be administered as often as the case requires. Any extra antipyretics, such as quinine, antipyrin, or whatever may be needed, are subject to the same rules in their administration. Sponging of the body entails such little inconvenience to the patient that it may be carried out at reasonable frequent intervals. The temperature of the chamber must be maintained at a uniform rate, the air kept pure, and all noises excluded as much as this is possible. Liquid discharges from the bowels, which frequently occur at the crisis period, as well as at other stages of the disease, should be carefully disinfected.

Radlauer's Antiseptin.—Radlauer looks upon this preparation as a chemical combination which he calls iodo-borothymolate of zinc. It is composed as follows:

R.	Zinci sulphatis.....	85
	Zinci iodidi.....	
	Thymoli.....	2½
	Acidi borici.....	10
M.		

Analysis has shown that it is simply a mixture of the above.

Obesity.—Marienbad has long had a reputation as a spa, its waters having a seemingly specific effect upon obesity as well as habitual constipation. While very efficacious in these conditions there exist certain contraindications to the use of this water, more especially where there is a tendency to congestion. The difficulty of obtaining a reliable and uniform article has brought on the artificial production or rather reproduction of this famous remedy. Its principal constituent is Glauber's Salt, or sulphate of sodium, there being also present chlorides and a number of carbonates. It acts pretty strongly on the bowels, the intensity of its effects being easily regulated by the patient using smaller quantities diluted with hot water.

The Marienbad water (Enno Sander's) is very useful in abnormal obesity and, while it procures large and copious stools, it in no way irritates, nor does it produce any sense of fatigue. Its action is thorough and its effects are to induce a feeling of comfort and ease accompanied by a diminution of the adipose. High-livers are especially gratified at its effects upon their economy on account of the thoroughness of its action.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

Dangers of Infection.—So far as animal parasites are concerned Dr. James C. White says (*Boston Medical and Surgical Journal*) that but little need be said with regard to the danger of acquiring any of the affections of this group. Of the three forms of pediculosis it is the variety *capillitii* only which the physician is liable to take. It is by no means an uncommon occurrence for him to “get lice,” as the expression is, in the performance of auscultation, chiefly among the poorer classes in cities, with whom it is extremely prevalent, and to carry it home to his family. It is the wife, however, generally who is the chief sufferer in such cases, for it is in her longer hair that the parasite finds the more favorable conditions for breeding, whilst in the very short hair of the doctor, as now worn, it rarely establishes a permanent seat. I have known not a few such instances in the household of members of this Society.

Scabies is the only other form of animal parasitic disease which the physician is liable to acquire by contact with patients, for although he may often be annoyed by the bites of bugs and fleas, so frequently found in the homes and upon the persons of the poor and dirty, their brief action upon his skin is but a trifling matter. The itch, however, is a much more serious affair, and as it has become a very common affection amongst us in the last few years (sixty-one cases seen at my clinic since October 1st), and as physicians often fail to recognize it, even in the most exaggerated cases when consulted, opportunities for its acquisition by themselves cannot be infrequent. Their exemption under these circumstances (for in my experience such cases of transference are not common, I can recall but one or two) is due, no doubt, to the fact that patients with scabies are handled at the dispensary or consultation-room when their hands and general surface are by exposure at a lower temperature than is conducive to the activity of the parasite, and because contact with the affected parts during a professional examination is necessarily very brief. Transference of the animal from one person to another is most generally effected, no doubt, by holding the hand for some time, or by longer surface contact with other affected parts of the body in bed, or during impure sexual intercourse. All possibility of such

infection can be positively removed by adopting the custom of washing the hands immediately after handling any suspected patient.

Stage of Invasion in Tabes Dorsalis.—Dr. H. M. Lash says (*Lancet-Clinic*) in regard to the stage of invasion of locomotor ataxia that the following phenomena are presented:

1°. Pains of a sharp, quick, lightning-like character, which in the beginning occur only occasionally, afterwards more frequently and paroxysmally, leaving in the muscles of the affected parts, commonly the lower extremities, a sensation of soreness. It is in this stage that mistakes in diagnosis are liable to be made. Patients are treated for rheumatism or neuralgia, or both. The three cases under his own observation were each so treated by different physicians, and it was not until they had passed well into the succeeding stage that the trouble was properly recognized.

2°. The spinal reflexes, particularly that of the patella, are either feeble or entirely absent.

3°. There is delay in the conduction of sensation; that is, a "perceptible interval of time" elapses between the touching or wounding of a part and its perception by the brain. This may amount to several seconds, and is a most important point in the diagnosis.

4°. At first, immediately after the attacks of the lancinating pains, there is ordinarily hyperæsthesia. But it is of short duration, and later on anæsthesia takes its place.

5°. The sexual appetite is increased, and excesses often committed even by those whose habits had been the very opposite. Until it was shown that this was incidental to, or more probably a *result* of, the condition, it was very generally believed that sexual over-indulgence was a prominent factor among the causes of the disease.

Curvature of the Spine.—Among some of the causes of this deformity, Dr. B. E. McKnight, gives (*Canad. Pract.*):

Chest diseases, such as empyema, which leave one lung in a permanently disabled condition, cause a very severe form of curvature, which is not amenable to treatment.

Seeing that the absolutely erect spine is but an ideal, not a reality, weakness renders slight causes operative in drawing the spine away from its position. The most frequent causes

thus operating are found in the habits of children, such as throwing the weight entirely upon one leg when standing, sitting at the desk with one shoulder in advance of the other, etc. In fact, any attitude which is frequently assumed grows into a habit, and various tissue changes follow as a consequence upon the incorrect position maintained, thus, if the weight of the body be thrown entirely upon the right leg, the left side of the pelvis is allowed to droop, the upper surface of the sacrum is in an oblique position, sloping downward to the left, and the axis of the lower vertebræ is directed towards the left side, thus causing a left lumbar curve, which must be compensated for by a curve toward the right, higher up, in order that equilibrium may be maintained. This position can be taken without causing any permanent change in the structures making up the spine, but if habitually assumed the intervertebral substances and the sides of the vertebræ upon the concave side become lessened by the greater pressure, and the parts on the sides of the convexity are permitted to increase in thickness. The muscles, also, and ligaments, intervertebral and others, upon the concave side become shortened, the rotation which is normally produced in lateral bending is maintained, and thus permanent organic changes result. Another cause that is occasionally operative is found in the difference of length of the extremities, by which a tilting of the pelvis is produced, the base of the sacrum brought into an oblique position, and, consequently the axis of the spine deflected from the perpendicular.

DISEASES OF WOMEN AND CHILDREN.

Improper use of Pessary.—At a meeting of the Chicago Gynæcological Society, Dr. D. J. Nelson spoke as follows: I have here an illustration of the improper use of a pessary that has been retained for a great length of time and has apparently done very little harm. It is very satisfactorily disinfected by what is to me a new disinfectant; it is an American-made product, and from my present experience in using it I should say it is simply creolin, but it costs only about half as much as creolin. It is called sulphonaphthol, and doubtless any of the druggists can get it if there is a demand for it.

The patient who wore this pessary is sixty-nine years

of age. She presented herself at my office July 21st; she has been a widow eighteen years, was the mother of two children, thirty-six and thirty-one years old respectively; she had had two miscarriages. This pessary was introduced for falling of the womb thirteen years ago in Philadelphia, and has never been removed until I removed it on July 21. The menopause occurred in 1865, some thirteen years previous to the introduction of the pessary. There has been a bloody discharge from the vulva for about two years. She has used warm-water douches for the past two years; previous to that time for eleven years she did not use anything but ordinary soap and water for external bathing. It is the open horseshoe Hodge pessary. When I removed it, the right-hand angle of the horseshoe was behind the sphincter of the vagina, embedded in the mucous membrane, and the right leg presented in the vulva; the left leg was just anterior to the cervix and embedded in the mucous membrane. It had by pressure passed through the muscular structure of the vagina, and was so firmly fixed that it required quite a little force to pull it out.

Hysterectomy for the Cure of Prolapsus Uteri.—Dr. McCosh, in the absence of the patient, showed before the New York Academy of Medicine (*Med. Rec.*) a photographic representation of a prolapsus uteri upon which he had recently operated by hysterectomy. The patient was a washer-woman and had suffered from prolapsus for some time, though until shortly before operation, she had been able to continue her work. When admitted to the hospital the prolapsed mass protruded outside the vulva as a tumor, the size of a Derby hat. Attempts to replace the mass were utterly futile, even after three weeks' rest in bed, and the most assiduous employment of all ordinary measures to reduce it in size. The mass consisted of the uterus, twice its natural size, with elongated cervix, the bladder on the anterior surface of uterus, and the thickened cervico-vaginal wall. The operation of hysterectomy was decided upon and done with very gratifying results, the patient now being able to attend to her household duties and ordinary work without discomfort. Hysterectomy in such cases, according to the experience of the speaker in this and some three or four similar cases, was a most tedious and difficult procedure. This was due to

several factors, among others, the attachment of the bladder to the uterus, requiring great care in its removal, and also on account of the very large bleeding surface left after operating. The elongation of the cervix in such cases, being, as he had observed it, from three to four inches, with its attachment of vaginal mucous membrane requiring separation, was another tedious factor.

Hæmorrhagic Ovarian Disease.—Dr. George W. Davis reports an interesting case of hæmorrhagic ovarian disease in which laparotomy was performed for internal hæmorrhage. Both ovaries were then removed, the case ending in recovery. The author states in the *Boston Med. and Surg. Jour.* that:

1°. His belief that the case is of great interest as explaining the source of hæmorrhage in obscure cases which may be found many times in a hæmorrhagic state of diseased ovaries and appendages.

2°. It is interesting and instructive to know that a patient may endure an operation of this kind and make a good recovery after the general circulation has lost so much blood, and this in a patient who had suffered from such general constitutional disturbance, as well as from local pelvic inflammation, lasting for several weeks.

3°. This case presents a strong argument showing that patients who require laparotomy can be successfully treated in their homes with the aid of good trained nurses, whom we fortunately have at our command. Furthermore, it tends to show that the general surgeon may be competent to meet the exigencies of similar cases, and that cases of emergency should not be allowed to die by a waste of time in attempting to obtain the services of a specialist from a great distance.

SURGERY.

Efficacy of Surgery.—In a plea for progressive surgery (*Am. Gyn. Jour.*) Dr. L. S. McMurtry says that one of the most convincing arguments as to the efficacy of surgery is that surgeons believe in it. That they do so believe is attested by the promptness with which it is invoked in behalf of their own lives and that of members of their own families. Those members of our profession who are not familiar with operative work, or who do surgery as a last resort, or under

protest, are disposed to oppose surgical treatment. They look upon surgery as dangerous, only to be resorted to as a last desperate chance. And they are right to this extent only; it is dangerous when utilized as a last resort, not otherwise. When the whole profession realize that surgery is at all times conservative, when major operations are performed by those who believe in surgery and have, by apprenticeship, acquired surgical skill, then will the progress of this great science and art be unobstructed by misunderstanding and misrepresentation.

Chromic Acid in the Treatment of Cysts.—Mr. W. R. H. Stewart states in the *Lancet* that within the last few months he has treated with chromic acid three cases of ranula and seven of cystic goitre with such satisfactory results that he ventures to make them known.

The three cases of ranula occurred in two males and one female: the former had received previous treatment without any benefit; the latter had not sought advice before. All three had large cysts, and the mode of treatment followed was the same in each. A portion of the cyst was cut away, and the contents washed out. A saturated solution of chromic acid was then freely applied with a chromic acid carrier to several points of the cyst wall. At the end of the week, the cavity having much diminished, the acid was again applied, and in from a fortnight to three weeks the wound had healed and all signs of the tumor had disappeared. There were no bad symptoms.

The seven cases of cystic goitre were in females. The tumors were tapped in the usual manner and the contents washed out. After all hæmorrhage had ceased, the saturated chromic acid solution was applied with a carrier through the cannula to the walls of the cyst, in the same manner as with the ranulas. Six of the seven cases healed rapidly after from two to three applications, but the seventh and second of the series resisted for a long time all attempts, and it was not until three months had passed and some half-a-dozen applications had been made that the tumor disappeared. But neither in this nor in any of the other cases was there a bad symptom, and he attributes the length of time the last-mentioned case took to heal to the fact that there was considerable amount of hæmorrhagic oozing, which

to a certain extent neutralized the action of the acid. It is therefore advisable to see that the hæmorrhage is, as much as possible, arrested before applying the acid.

Treatment of Squint.—Dr. A. R. Baker states in the *Columbus Medical Journal* that in treating cases of squint, he has usually been governed by the following rules :

1°. If the squint is alternating and the vision fairly equal in both eyes, it is seldom necessary to operate. A full correction of the ametropia will usually result in cure of the squint.

2°. If the squint is fixed in one eye, but the vision of the squinting eye good, the same rule should be observed, excepting that atropia should be instilled into the working eye occasionally and possibly a patch kept over it, and orthopedic exercise indulged in as described by Landolt.

3°. If the squint is fixed on one eye and the sight very defective, and no improvement after patient trial with lenses and covering good eye, only a cosmetic result can be obtained. The operation should be performed any time after the sixth year.

4°. If the squint be fixed in one eye and the vision of this eye is slightly defective, it is possibly undergoing deterioration from disuse, and should be carefully exercised, watched and tested. If the deterioration of vision appears to be increasing, an operation should be performed at once.

Profit Sharing.—In a very comprehensive study of the economic distribution of earnings versus profit sharings (*Social Economist*) Mr. Alfred Dolge states that "improved machines can be invented and manufactured, but improved laborers can only be developed. One may work a machine till it breaks down, then have a new and perhaps a better one made to take its place. But this is not true of labor. If laborers are poorly paid and overworked, and ill housed, they not only become less efficient themselves, but their children, who are to take their places will be no better, and sometimes even worse. In this way the development of superior laborers, to say nothing of superior citizens is prevented." In the same manner poorly paid and overworked doctors are apt to become less efficient and this condition is directly traceable to that of the laborers.

Book Reviews.

A Manual of Practical Obstetrics. By EDWARD P. DAVIS, A. M., M. D. 8vo. pp. 298. With one hundred and forty illustrations, two of which are colored. [Philadelphia: P. Blakiston, Son & Co. 1891.

This small work is just what it implies in its title. It is a practical work written for the guidance of senior medical students and it is so clear in its precepts and so thoroughly illustrative in its methods that the veryist tyro should gain a clear comprehension of the subject of obstetrics from a study of its pages. Written by one who has had experience as a practical accoucheur and as an instructor in this important branch of medical knowledge, we have presented to us, as a result of his labors, a practical and instructive book on the subject.

He has not only drawn from the works of the leading obstetricians, but he has had the further personal assistance of Prof. Parvin, whose erudition in this subject is too well known to require commendation at our hands. The illustrations which are given are very clear and large enough not to be in any manner confusing, while the plates, which number eight, are in the highest style of art, more particularly the two which are printed in color. Being taken from nature these plates possess an added value and increase the usefulness of the work.

The teachings throughout are practical and to the point. While the author advocates prompt and energetic measures, he does not by any means encourage meddlesomeness which is usually pernicious in its effects. He believes in watching a case closely and in doing promptly those things which are of the greatest use and value in reducing pain and mortality.

Transactions of the Association of American Physicians. Sixth Session, 1891. Vol. VI. 8vo. pp. 319. [Philadelphia: Printed for the Association, 1891.

This volume comes to us as a most welcome visit from an old friend, who is rejuvenated and endowed with more vigor than ever. The Association of American Physicians, is a body of men whose work is one of the best evidences of their capacities and capabilities.

In the present volume we are presented with a series of papers of the highest value as contributions to medicine and they are all well considered and finished essays upon the subjects of which they treat. We can not enter into an analysis of all and to select any few would appear like making an invidious distinction. Suffice it to say that there are twenty-three papers dealing with clinical reports, pathological subjects and theoretical medicine in its practical applications.

In these various essays we find a true reflex of a year's progress in some departments of medicine and the collection in its entirety is one which seems an almost indispensable adjunct to the completion of the library of every progressive physician. The manner in which the volume is gotten up also speaks well for the Association. The volume is handsome and durable. The print is clear and large and all the mechanical details are such as to render the book an ornament to any book-shelf.

Surgery: Its Theory and Practice. By WILLIAM JOHNSON WALSHAM, F. R. C. S. Third Edition, Revised and Enlarged with 318 Illustrations. Small 8vo., pp. 748. [Philadelphia: P. Blakiston, Son & Co., 1891. Price, cloth, \$3.00; leather, \$3.50.

Walsham's Surgery is a success as a text-book, and its popularity is shown by the fact that the present edition was called for one year after the appearance of the first. It does not pretend to be a complete work on the subject, but rather a guide to the theory and practice of surgery. It is a representative of the older school of conservative surgeons who are not adverse to the adoption of the more modern innovations, but whose adoption is made with certain restrictions. As a guide for a fuller understanding of the manuals on the subject, this book will be found valuable.

While a few pages are devoted to syphilis, and a few of the surgical diseases of the skin, diseases of the eye and nose are not considered; neither does the author treat of gynecological or orthopedic surgery. We say this with a reservation, of course, which is, that only the principal surgical affections are considered in a brief manner, the dominant idea being to place the reader on the right track for the reading of more compendious works treating of those particular subjects.

One notable change in this edition has been the adoption of Virchow's theory of inflammation instead of that of Cohnheim. Bacteriology, tubercle, and hydrophobia have been extended, and a short account of actinomycosis has been added. In reading over the pages of this book, we are at times reminded of the difficulty occasionally experienced by a writer in adapting himself to new conditions in the progress of science. Thus, in the present instance, we are told that the pus in a healthy person is "laudable," and we are given the old clinical varieties in addition to the bacteriological divisions, which are now about the only ones accepted.

The author does not speak of using chisels in making openings in the skull as he evidently prefers the conical trephine; and yet there are many good operators who contend that better, neater and safer work can be done by the use of chisels and gouges. In peritonitis he advises opium, salines, turpentine stupes, etc., unless the causative factors be such as to demand operative interference. In fact, it will be found that operative measures are cautiously advocated in general, the author not seeming to be an over-ardent supporter of such procedures.

Taken, all in all, this work is quite complete, and may be taken as a safe guide. Intended for students or der to direct their surgical training in proper channels, it has deservedly won the approbation of the mass of physicians who are called upon to operate in the course of their daily practice.

The book is well printed on good paper, and, while some of the illustrations have already done good service on former occasions, they are all of such a nature as to be of real help to the reader. The binding is very neat and reflects credit upon the publishers, as does the typographical work. The index which closes the volume is quite full, although, perhaps, not so analytical as we should like to see it.

The Medical Society of the State of New York held its Eighty-sixth annual meeting at Albany, Feb. 2-4 last. It was a pronounced success, and the list of contributors to the proceedings is one which reflects great credit upon the character of those who were in attendance.

Literary Notes.

The Ohio Medical Journal has added to its appearance by a new cover.

The Albany Medical Annals has added to its pages and has also adopted a new cover.

The Physician and Surgeon now appears in a new cover and its size has been somewhat enlarged, thus giving it a handsome appearance.

International Medical Magazine has made its bow, the initial number being dated Feb. 1892. It is a neatly printed octavo of 112 pages, edited by Dr. Judson Daland, and published by the Lippincott Company, of Philadelphia, at the price of \$4 per year. It is a neatly gotten up journal, with excellent illustrations, and containing valuable matter. It is designed to be a monthly, and if the high standard adopted in the first number is kept up it will easily hold its place in the front rank of American medical publications.

Announcement.—W. B. Saunders, of Philadelphia, the publisher, announces the following important new medical works as now in preparation, ready for delivery about June 1, 1892. They will be sold only by subscription:

An American Text Book of Surgery, by Professors Keen, White, Burnett, Conner, Dennis, Park, Nancrede, Pilcher, Senn, Shepherd, Stimson, Thomson and Warren. It is to form one handsome royal octavo volume of about 1200 pages (10x7 inches), profusely illustrated with wood cuts in text, and chromo-lithographic plates. Price, cloth, \$7.00; sheep, \$8.00.

An American Text Book of the Practice of Medicine, according to American teachers, edited by William Pepper, D.D., LL. D., the provost of the University of Pennsylvania. This is to appear in two handsome royal octavo volumes of about 1000 pages each, with illustrations to elucidate the text wherever necessary. Price per volume, cloth, \$5.00; sheep \$6.00.

He also announces a new Pronouncing Dictionary of Medi-

cine, by John M. Keating, M. D., and Henry Hamilton, and a work on Diseases of the Eye, by G. E. de Schweinitz, M. D., both to be ready in a few weeks.

Books Received.—The following books have been received and will be reviewed in due course of time:

Diseases of the Bladder and Prostate. By Hal. C. Wyman, M. D., M. Sc. (Physician's Leisure Library.) 12mo., pp. 132. [Detroit, Mich: George S. Davis, 1891. Price, 25 cents.

Diagnosis and Treatment of Hæmorrhoids and Other Non-Malignant Rectal Diseases. By W. P. Agnew, M. D. Second edition. 12mo., pp. 148. [San Francisco, Cal: R. R. Patterson, 1891.

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Society Proceedings.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting, January 16, 1892; the President, Walter Coles, M. D., in the chair.

Supra-Vaginal Hysterectomy.—Dr. A. V. L. Brokaw presented pathological specimens. The first was the result of a supra-vaginal hysterectomy performed six weeks ago on a colored woman 48 or 49 years of age. She gave a history of tumor extending over many years. On being seen for the first time three months since, she wished for an operation, and the speaker was willing to undertake it, though her domestic circumstances and surroundings, and the history of the case contributed to render the result unfavorable. There were evidences of pyonephrosis and she was also dropsical. A median incision being made, the tumor, which was universally adherent, was immediately encountered. The nodular mass, readily felt anteriorly, was found to extend quite a distance upwards; but behind the hardened anterior portion, there was what seemed to be a cystic growth. Enucleation was commenced with the hope of being able to form a pedicle of the fibrous portion of the tumor. The adhesions were very dense anteriorly but were separated and the tumor enucleated. Price's operation was preferred, but this was not practicable. In separating the adhesions, a large cyst was ruptured and a gallon of fluid escaped. The fibrous portion of the tumor originated from the fundus of the uterus. With great effort the pedicle was reached and found to be as thick as the hand; and this was ligated in sections, and attached to the inferior angle of the incision. The cyst wall was then pulled down, attached around the incision in the parietes, and tented with bi-chloride gauze. The woman made an uninterrupted recovery; her urine is now almost normal and the œdema of the limbs has disappeared entirely. She is up and about attending to her ordinary duties.

Pyosalpyngitis and Degeneration of the Ovaries.—The second specimen was from a case referred to the speaker by Prof. Barton Cooke Hirst and Dr. J. K. Mitchell, of Philadelphia. The history of the patient, a resident of St. Louis,

dates back sixteen or seventeen years, following an ovarian tubal trouble. She had been the rounds of the gynecologists here and elsewhere. Barton Cooke Hirst advised an operation, but as she did not want to have it done there he told her to return home and have the operation performed. The speaker accordingly operated and found the worst case of pelvic surgery that he had ever met with. The adhesions were so extensive and dense, that it required all his physical strength to separate those portions of the tubes and ovaries which were at the bottom of the pelvis. Uterus, ovaries, tubes and intestines were completely matted together. After enucleating the structures and flushing out the abdomen, a drainage tube was inserted. On the third night feces began passing through the drainage tube. A stercoraceous fistula had developed and persisted for sixteen or seventeen days. With a milk diet this subsided and the abdominal incision healed in its entirety. As a result of the stercoraceous fistula, she had, as the speaker had seen in one or two other cases during this grippe season, stitch-abscesses, all the stitches having suppurated. She is now practically well.

Appendicitis.—The next specimen was from a case of appendicitis which terminated fatally. The patient, a young man of about twenty years of age, an invalid for more than a year, had had a mild attack of inflammation of the bowels, as he called it, some months ago. He was a tubercular subject and had had repeated severe hæmorrhages.

He was seized suddenly at three o'clock in the morning with a violent pain in the abdomen. Having morphine in the house, he immediately took several large doses, and was seen by the speaker's father the next morning at nine o'clock. At that time the symptoms were somewhat masked. After watching the case for a few hours, consultation was had with several surgeons, among others Dr. Prewitt and Dr. Dalton. No definite signs of appendicitis were manifested. The symptoms were obscure, being masked by the morphine which the patient had taken, so no positive diagnosis was made. Dr. Dalton, however, maintained, from the beginning of the consultation that an exploratory operation ought to be done at once. The speaker did not quite agree with him at that time, because the pathognomonic symptoms usually elicited by pressure over the McBurney's point were not well marked.

Still the operation was performed with the probability that definite localized inflammatory lesions would be found. On opening the abdomen by the median incision, only forty hours after the beginning of the trouble, there was found, to the surprise of all, a general suppurative peritonitis. The appendix, which was not adherent, was readily tied off. The abdomen was flushed out and a drainage tube introduced; the patient's temperature, never very high, soon came down almost to the normal. The next morning he was doing very nicely, but at midnight following he became wild, delirious and unmanageable, requiring the constant effort of the operator and an assistant to keep him in bed; opiates, though reluctantly given, were absolutely necessary to quiet him. They, however, proved inefficient and the patient died forty hours after the operation. The case demonstrated that in obscure cases, when in doubt, an operation should be done. The speaker had known stercoraceous fistulæ to follow cases in which the tube was used, and others in which it was not used. He cited three such cases and all eventually did well. Five per cent of abdominal or pelvic cases are followed by perforation of the bowel; that is the experience of Price and Tait, and other of large experience.

Stated meeting January 23, 1892; The President, Dr. Walter Coles in the chair.

Dr. F. R. Fry read a paper on *The Treatment of Alcoholism*.

Dr. Wm. Johnson said that the question was one of the abuse, rather than the use of alcohol. The use of alcohol in some form, was prompted by nature, and was not an hereditary appetite, as ordinarily understood. Parker had proved that alcohol, with certain limitations, was a food. He believed that the surroundings of a man, as in other matters, tended to create an appetite for strong drink, and the best treatment was that which removed the patient from such unfavorable surroundings, and imposed severe penalties, such as hard labor, on those who were guilty of excesses.

Dr. A. B. Shaw stated that unquestionably the prerequisite in a satisfactory treatment was to remove the patients from their unfavorable surroundings, and put them in an institution set apart for their treatment. In his opinion it was puerile to attempt to treat such patients unless this was done.

Dr. Hurt said that while prevention was undoubtedly better than cure, as to the means of prevention, differences of opinion must exist. Scientists tell us we are in a state of volitional development, and there may come a time when we shall not feel the necessity for nervous stimuli, but at present he questioned the propriety of entirely prohibiting the use of alcoholic beverages, believing that we should succeed better in an attempt to restrain their abuse. Severe laws against drunkenness should be enacted, and he believed that when men saw clearly the penalty of their indulgence, they would not so easily give way to their appetites.

Dr. McPheeters believed, with Dr. Fry, that in the institution plan of treatment lay the solution of the question. Chronic alcoholism is tenfold more disastrous in its results than insanity, and entails more crime and pauperism than all other causes together. He believed that public sentiment should be aroused to this fact, and institutions for its treatment provided by legislature and municipal enactment.

Dr. Spencer Graves thought the good likely to follow the institution plan of treatment somewhat exaggerated. Patients who would voluntarily submit themselves to this plan could quit the habit without it. It was not such a very difficult thing; he had known many men who had broken themselves of the habit after learning from a physician its evil consequences. The difficulty was in getting them to give it up soon enough. Those who would be forced into such institutions, would, as a rule be too far gone to be much benefited.

Dr. Loftus thought that from what had been said, it seemed that very few of the physicians had attempted to treat alcoholism as a disease. He never had. He had treated cases of delirium tremens, but had given little or no thought to the subsequent condition of the patient. He supposed that in hospitals where inebriates were treated, some attention was paid to the more remote effects of alcoholism, but so far as he knew, very little had been reported in medical literature. The question was, whether bichloride of gold had any effect in curing the appetite for drink. He had known one regular physician who had used a preparation of bichloride of gold, and who stated that after the treatment the patient's appetite for drink was gone.

Dr. Bremer said that the question of Dr. Loftus was the

pivotal point in the discussion. We could not ignore the fact that a great movement had been inaugurated by Dr. Keeley, and a great many people had been apparently cured. Anybody who had had much to do with alcoholics, and knew the difficulties of treatment, and the general unsatisfactory results would hail with delight any cure or any drug which would take away the alcoholic appetite with the same certainty that quinine cures chills and fever, or the salicylate cures rheumatism. But it was very difficult to know whether this had been, or was being done. He had known patients at St. Vincent's, brought there against their will, who had never touched a drop of liquor for two or three years afterwards; and he had known other cases, coming of their own will, and under the most favorable circumstances, who got drunk as soon as dismissed. But it was very easy to keep track of patients, for those who relapsed were brought back. But he understood that at Dwight no backslider was received. It was a good rule, for one backslider would demoralize a whole house. Such a method would, of course, make it impossible to obtain reliable statistics, and those adopting it had everything their own way so far as statistics were concerned.

He believed that there was a peculiar charm in the word "gold," which was first brought forward by Niemeyer as a remedy in obscure and chronic female disorders. Many physicians had used it with varying results. In his own experience it had done good only when the patient knew he was taking gold.

He thought that the ideal place to test alcoholism was in a temperance town, where it was impossible for the patient to obtain a drop of liquor, and such a place he understood Dwight to be. Closed institutions are very depressing on alcoholics, and many of them would drink from sheer revenge the moment they were released. When a man has will power enough to voluntarily go to a distant place and put himself under treatment, the battle is half won, and in this respect the voluntary colonization which prevails at Dwight in an important step in the right direction. He believed, with Dr. Fry, that special institutions for the treatment of alcoholics were necessary. These patients were out of place in insane asylums. But to get them into those institutions, legislation would, of course, be needed; and as a rule the average legislators, es-

pecially those from the larger cities, have a holy horror of legislating in favor of, or, as they would put it, against alcoholism. They have a natural sympathy for alcoholics, and it is the same with juries. The speaker, on the whole, was rather favorable impressed with the Keeley treatment. He had known patients who expressed themselves cured by it. It was unscientific, because no statistics were obtainable, and it savored of quackery, because those practicing it were opposed to investigation. But he apprehended that if the halo of mystery which clings to the treatment and to the personality of the originator were taken away, there would be very little left. There have been booms of this kind before, and the cure of drunkenness is not new. But as a rule, the plans of treatment have collapse with the demise of the originator, and so he predicted of the Keeley cure. But there were certain points in the treatment, which, if properly discriminated, might be of great value to the profession.

SATURDAY EVENING, February 6th, 1892.

Stated Meeting. Dr. H. C. Dalton in the chair.

A Case of Uterine Fibroid Tumor.—Dr. Edward Borck: Mr. President and gentlemen: the specimen that I present this evening I removed from a lady forty-one years of age, American by birth, five feet nine inches tall, blue eyes and dark hair; weight one hundred and sixty-five pounds. She had been married for the last three years. I knew this lady for at least eighteen years. She has always been in good health; hardly ever sick. About eight years ago she came to me stating that she felt a growth or kind of tumor in her right side of the abdomen. I then made an examination and found at that time that there was an enlargement. I could distinctly feel the right ovary; at that time I was not satisfied in my own mind whether the tumor was ovarian or connected with the uterus. Of course, the diagnosis can be made, you understand that, but not as easily as we expect to; it is said if we can move the tumor without the uterus, it is not connected with the uterus; but if the uterus moves with the tumor, then it is connected with the uterus. That is very nice in books, but when you come to make an examination it may not be so very distinct. When I saw the patient eight years ago, I thought probably it was a fibro cystic tumor. I kept this lady under my observation; she menstruated regu-

larly and had hardly ever been sick. Two years afterwards I made another examination of her condition, and found the tumor somewhat larger, and she asked: Why can you not take it out. I advised her to let it alone as long as she felt well. About six years ago I examined her again; it had grown larger. About three or four years ago she came to me and said that she had an offer of marriage; she said that she had told the gentleman her condition, and he wanted to marry her with or without the tumor, but that she would rather have it out, and she asked me if I would not operate then, I told her, after a careful examination that she had better wait; that some day it would become necessary to remove the tumor, but in her present condition I advised her, if she wished to enjoy the pleasures and woes of married life, to marry with the tumor. She had no pain and was able to attend to her household duties. She was well except for a little headache. I do not in such cases advise or urge an operation; I prefer that the patients should come to me and wish it to be done. At that time, about four years ago, she measured forty or forty-two inches around the umbilicus; she now measured about fifty-two inches; having gained a volume of ten inches within a few years. She was a heroic woman; I admired her way of doing; she said I never complain—and she never did—I have a good husband, and I would not let him know that I suffer, nor any of my relatives; but she said, I can not stand it any longer; the pain is becoming very bad; I can not bear the weight any longer; I have headaches; I have fainting spells and they come on frequently; they would come sometimes two or three a day, and again only once a week perhaps; she said that under the circumstances she was ready to undergo anything rather than suffer any longer, that she would prefer death, though she did not like to leave her husband—hoped she would get well. Under these circumstances I said very well then, get ready and we will operate. In my opinion this was the only chance for her, she could not have lived many months in her condition. I removed this tumor on the 28th of January, the patient being prepared in a careful way; you all are acquainted with and understand my method. You see that it is a tremendous growth with several smaller ones attached. When I opened the abdomen this tumor presented, and I had to make an incision from the pubes to a point above

the umbilicus to get it out, and it took two men to hold it. After I had the large tumor removed we found the small ones and I removed them. There was still another tumor connected in the right iliac region, but it was so adherent that it was impossible to remove it; the vessels were large; the adhesions extended all around the abdominal walls, to the bladder and in handling the tumor it seemed to me that this tumor involved the uterus. I thought it prudent not to touch it but leave it alone. The patient lost very little blood. Before the operation her temperature was a little above normal, her pulse a little over one hundred and her breathing was hurried. I had the able assistance of Dr. William W. Graves, Dr. Hurt administered the chloroform and there were also present Drs. Mullen and Culp and my matron, Miss Stoffregen. The patient rallied from the operation pretty well; but at three o'clock on Friday morning her temperature rose to about one hundred and three; her breathing was hurried and she had one of those dreadful fainting spells; I then hastened to her bedside and she said that she had one of those spells coming on again. I made an injection in her arm of alcohol to stimulate her and she revived very nicely; towards morning she did well, and took a cup of milk; she was cheerful and thought she was doing well; about 11 o'clock she took another fainting spell and towards dinner time—between one and two o'clock—she said she was going to have another spell. I sent for her husband who came just in time to speak to her—she was perfectly conscious, when she went into one of those fainting spells and died at three o'clock, about thirty hours after the operation.

After death the embalmer came and took care of her. I made a postmortem and dissected out this other tumor and you will find here the whole uterus involved in the diseased growth; one of the ovaries is connected with this—in fact all of it was connected by adhesions; I put a catheter in here to show the opening into the womb. I will say that I am glad that I did not remove that tumor at the operation; I think it would not have been justifiable to attempt it as the lady might have died on the table. The intestines were pushed to the side, and the interesting point in the case is that the descending aorta was perfectly flattened and not round; this was no doubt produced by the pressure of the tumor, and I think that caused

her fainting spells. The iliac arteries and also the intestines were compressed. The tumor weighed thirty-seven and one-half pounds after it was removed; I suppose it has shrunk somewhat since. I did not immerse it in alcohol to preserve it, but I used instead a solution of nitrate of potash and salt, one part of nitrate of potash to three parts of salt; it keeps the specimen quite fresh and sweet; the other abdominal viscera were normal. Since I reported a similar case in June last, I operated in several other cases, simple cysts with more success. This is my seventy-third case. Some other time I will make some remarks on laparotomies.

Dr. McIntyre: I think this teaches us another lesson in regard to the judiciousness and the duty of the surgeon when a case like this comes under his care, to remove the uterine appendages early and stop the growth. Looking upon this in the light which I do, believing, as I do, in regard to the possibility of doing that, and basing my remarks on experience which I have had in such cases, I affirm that this case shows the correctness of the line of practice which I have adopted of operating in such cases. I have nothing to say in regard to the details of the operation. These tumors are always of interest to me. Three weeks ago I removed a tumor precisely of the same character as this, but not quite so large—it weighed ten pounds less than this, but in that case a multilocular ovarian tumor weighing forty-four pounds was associated with the tumor. I believe that an ounce of prevention is not only better than a pound of cure, but whole worlds of cure.

Dr. Edward Borck: Dr. McIntyre says that this case teaches us a lesson; I think it does no doubt teach us a lesson, but not the kind of a lesson that the doctor implies. He says we should remove the uterine appendages early in such cases and stop the growth of the fibroid tumor of the uterus. If I had removed this early—if I had removed this about eight years ago, I should certainly have removed the whole uterus and that might have stopped it, but I do not see how you could stop the growth of a fibroid of the uterus by removing the uterine appendages; that has never been proven. I will tell you gentlemen, the lesson which this case teaches is: that we should not operate in such cases early, but do like I have done, wait till the patient suffers pain and discomfort and is unwilling to stand it any longer. If I had removed

this tumor four years ago the patient might have died then, but by delaying the operation her life was prolonged a number of years. This is the sublime lesson.

In a simple ovarian cyst, I would operate early, the earlier the better. In a case like this I am not in a hurry. I have proven to you by previous cases that this is correct. If one should be tempted to remove the appendages of the uterus in the vain hope of stopping a fibroid growth of the uterus; thereby unsexing the poor woman; and the growth of the tumor would still go on, he would feel very sad. Remember that I informed you that this patient menstruated regularly all the time.

Dr. Dalton: You think she died from syncope and heart clot, I suppose?

Dr. E. Borck: Yes, sir.

Dr. Dalton: In what condition did you find the pelvis post-mortem?

Dr. E. Borck: It was perfectly normal except the part where the tumor was; there was no leakage nor a drop of hæmorrhage.

Melange.

Suicides in Russia average 2,215 a year.

An International Congress of Obstetrics and Gynecology will be held in Brussels, September 14 to 19, 1892.

The Medical Association of Georgia will hold its forty-third annual session in Columbus on April 20-22. From what we have learned a large and interesting meeting is promised.

Dr. Paul F. Munde has permanently retired from medical journalism. Why is it that so many efficient editors have lately thrown off the harness? Does this prove that journalism pays?

Trichinosis.—There is an epidemic of trichinosis in Russian Poland, and many deaths have occurred. In one village an entire family, containing eleven members was exterminated by the disease.

The University of Dorpat, in the Baltic provinces of Russia, which has hitherto had German professors, and has been attended by German-speaking students, is to be Russian-

ized, the government having given notice that after a certain date, in the near future, only the Russian language will be allowed in the lectures and examinations.

Small-Pox.—Some eight or ten cases of small-pox have recently been discovered among the Italian residents of New York, and the disease appears to have been brought from Newark, N. J., where it is said to have gained considerable headway.

Depopulation of France.—A subject of remark at the present time in France is the decrease in the population. In a paper read before and well received by the Academy, M. Féréol did not hesitate to point out that the true cause for this was to be found in the wide practice of the principles of Malthus and the author of the paper pointed out the inevitable national decadence which must result from such practice.

A Bright Genius has discovered that no one can read all the books and review them properly, more especially as regards the medical works sent to a journal. As no one ever made such a wild assertion, and as furthermore the critic in question requires much labor and "thought" to read a book his observations are entirely fitted to his mental calibre. We are assured however, that he has quit drooling and that there is no immediate danger of a relapse occurring.

Membership in the American Pharmaceutical Association is obtained only by election at the annual meeting. "Every pharmacist and druggist of good moral and professional standing, whether in business on his own account, retired from business, or employed by another, and those teachers of pharmacy, chemistry and botany who may be specially interested in pharmacy and materia medica," are eligible for membership. For blank application and further information, address Dr. H. M. Whelpley, 2729 Washington avenue, St. Louis, Missouri, chairman of committee on membership.

Newspaper Medicine.—The *Post-Graduate* says that the doctor who does not read the medical cases in the daily newspapers, misses a great deal of sound knowledge. The latest we have seen is that of a young girl of nineteen, who died in great agony after six years of suffering from the effects of vaccination. The details of the case are harrowing, if not scientific. The poor girl was unable to "lie in bed or stand

erect." Just what position she assumed is not stated. At one time she was removed to Bellevue Hospital, "where Dr. Janeway endeavored to cure her." Finally "the physicians frankly confessed themselves puzzled." Her limbs became so rigid after death, when she weighed forty pounds, that they could "with difficulty be straightened." We shall expect soon to see this painful account doing good service in an anti-vaccination pamphlet.

The International Dermatological Congress will hold its second session in Vienna, September 10, 1892. The president is Moritz Kaposi, G. Riehl being the secretary. All those who desire to participate should send to the secretary, 1-20 Bellaria strasse, 12, Vienna, who will send them a copy of the rules. Books, drawings, photographs, models, instruments, specimens, etc., are to be sent to Dr. Hans Heyer, I., Stefansplatz 8a. A charge of ten francs or eight marks (about \$2.00) will be made per square meter occupied, this sum being used to defray the expenses of arranging, guarding and insuring.

The Physician's Financial Status.—The *Medical Age* is very correct in its position when it states that it is a well known and deplorable fact that few physicians attain a degree of financial success which enables them at their demise to leave their families well provided for. It is usually contended that the ideal physician should be more or less of a philanthropist or humanitarian, and one result of this impression is to make the doctor's patients careless of attending to the doctor's fee. The fact that the physician himself is often a most inefficient business man helps to foster and perpetuate the laxity of the public in setting his bills.

A Unique Hospital.—An absolutely unique hospital is that situated on the shores of the lovely Tegernsee, in Tyrol (*Coll. and Clin. Rec.*). The house surgeon and the four Sisters of Mercy in charge of this establishment are all of royal birth. The pure air of the mountains and the complete absence of dust are two of the most powerful agents of rapid recovery for the 2000 to 3000 patients whom come yearly to have their eyes treated by the owner and doctor in chief of the hospital, Duke Karl Theodor of Bavaria. The Duke has founded this beautiful institution for poor people, and he has effected wonderful cures during the past years. His lovely wife, the Duchess Marie José, Infanta of Portugal, is the guardian angel

of the house. Her abnegation and entire devotion to the sufferers, who come from all sides to be treated by her husband, together with her extreme beauty and gentleness, endear her to all. At six o'clock in the morning she arrives at the hospital to assist the Duke during the operations, which take place in the early morning.

Dr. Robert P. Bush, of Horseheads, who have elected Speaker of the New York State Assembly, January 5, 1892, has the distinguished honor of being the first physician who has ever held this high office. He was chosen by the unanimous vote of his party, in caucus, to preside over the most important popular legislative body in the United States, next after the house of representatives. Physicians throughout the States and nation should take pride says the *Buffalo Medical and Surgical Journal*, in the fact that a regular practitioner of medicine, who has won an honorable name in his profession, has been accorded such distinction by his political associates.

Drunkenness and Crime.—Sir Henry James lays down the following rules:

1°. In determining the legal character of the offense committed, drunkenness may be taken into account where it has established a condition of positive and well-defined insanity.

2°. If it produces a sudden outbreak of passion occasioning the commission of crime under circumstances which, in the case of a sober person, would reduce the offense of murder to man-slaughter.

3°. In the case of minor assaults and acts of violence it can never form any legal answer to the charge preferred, but it may aggravate or mitigate the character of the act committed—probably aggravate it.

4°. As to the effect that should be given to drunkenness when determining the amount of punishment to be inflicted, no general rule can be laid down. Its existence may be considered, and may tend either in the direction of increasing or diminishing the punishment.

A Medical Strike.—There is a vacancy on the medical staff of the hospital in Tilsit, Prussia (*Med. Rec.*) When the vacancy occurred the municipal authorities advertised for candidates, stating that the salary would be 1,000 marks (\$250) a year. Thereupon the local medical society caused an announcement to be inserted in the papers, immediately below

the advertisement of the city fathers, stating that the salary was too small and that none of the physicians of the place would accept an appointment for less than 1,500 marks. They also advised physicians from outside to think awhile before presenting themselves as candidates for the position, intimating that the lot of anyone accepting the appointment would not be a happy one. The mayor of the town acknowledges that the salary offered is very small and almost insulting in its minuteness, yet he thinks the city can buy some needy doctor for the price.

Patent Pills.—*Hygiene* has published the following analysis of pills said to be worth a guinea a box :

MR. STOKES' REPORT.

Analytical Laboratory,

December 21st, 1891.

DEAR SIR,—On December 15th I received from you a box of "Beecham's Patent Pills." The box was securely fastened with the unbroken label of the Inland Revenue Office.

I have now made a careful chemical and microscopical examination of the pills.

The mass of pill material consists of ground ginger.

The active ingredient of the pills is aloes.

In my opinion the pills consist solely of aloes and ginger mixed up with soap.

Yours faithfully,

ALF. W. STOKES, F.C.S., F.I.C.,

Public Analyst

To the Editor of *Hygiene*.

The public will still buy, for the public likes to be deceived.

Dual Notification.—A writer in the *Provincial Medical Journal* states that the advocates of dual notification assert that the amount of infectious disease may be very materially lessened, or in time entirely got rid of by

1. Obtaining early information of its existence.

2. Isolating those persons affected.

3. Correcting sanitary defects which can be shown to have originated the outbreak.

But it will readily be seen that the extent to which infectious disease may be lessened, according to this statement, depends upon very uncertain factors, viz:

1. Notification being regularly and efficiently carried out.

2. The recognition of what is infectious disease by those called upon to notify.

3. The willingness of those implicated to send for a medical man.

4. The recognition and notification of infectious disease before it has had time to spread.

5. The proper isolation of all infected persons.

6. The hunting out of the real cause of the outbreak and seeing it corrected.

THE ST. LOUIS Medical and Surgical Journal.

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VOLUME LXII.—APRIL, 1892.—No. 4.

Original Contributions.

ANOSMIA OR LOSS OF THE SENSE OF OLFACTION. By O. PRESCOTT BENNETT, Professor of Anatomy, American College of Dental Surgery, Lecturer on Rhinology and Laryngology, College of Physicians and Surgeons, Institute of Rhinology and Laryngology, Chicago Policlinic.

Many patients which you will be called upon to treat will be suffering from anosmia or loss of the sense of olfaction.

This affection is more common than you would suppose, and although not serious in itself, it may prove very annoying to the patient, for the sense of taste, being so closely related to the former, is in the majority of cases, sooner or later, also somewhat impaired.

The impairment of these two senses subjects the patient to certain dangers as the inhalation of poisonous gases, fumes, etc.

The olfactory region is in the upper part of the nasal cavity—the olfactory membrane or that part of the nasal mucous membrane supplied with the filaments of the olfactory nerve covers over the superior and upper half of the middle turbinated bodies and the corresponding part of the septum.

It is necessary for the odoriferous particles to have free access to this region in order to have an odoriferous impression. The particles or emanations reaching this mucous membrane are dissolved by the secretion covering it and are brought in direct contact with the nerve filaments.

ETIOLOGY.—The causes of anosmia are numerous. The most common of all are diseases of the nasal mucous mem-

brane, as acute, hypertrophic, atrophic, specific or scrofulous rhinitis or mucous polypi. Acute or hypertrophic rhinitis or mucous polypi may cause anosmia by obstructing the free passage of the odoriferous particles to the olfactory membrane.

Chronic, atrophic, specific or scrofulous rhinitis may cause the same by inflammation, involving the olfactory membrane and by arresting the action of the mucous glands which secrete the fluid necessary to dissolve the odoriferous particles.

Over stimulation of this region by the inhalation of strong odors, or the continued use of irritating snuff, or the local use of certain drugs, as morphia, alum, tannin, etc., frequently impairs, and may destroy the sense of smell.

Central brain lesions as abscesses, tumors, and lesions of the olfactory bulb and nerve are often accompanied by anosmia.

A number of cases have been reported, in which the patient, after receiving a blow upon the head, recovered fully from the effects of it with the exception of the loss of smell. This was probably due to the separation of the olfactory bulb from the brain.

Paralysis of the fifth pair of cranial nerves may cause anosmia by interfering with the nutrition of the nasal mucous membrane. In paralysis of the seventh pair the patient may not be able to sniff up the odoriferous particles and the obicularis-palpebrarum, being involved in the paresis we may have anosmia by allowing the tears to flow over the cheek instead of passing through the lachrymal canal and furnishing necessary moisture for the nasal mucous membranes.

Deficiency of the sense has been observed in Albinos and white animals, while in those in which the sense is most acute—the olfactory membrane is very dark in color. Hence it would seem that the presence of pigment cells in the immediate proximity of the terminal filaments are necessary to the proper development of this special sense. Anosmia may follow frontal neuralgia.

McKenzie believes that defective olfaction may be hereditary. Frequently cases are found in which we are not able to find any explainable cause.

SYMPTOMS.—Loss of smell may be unilateral or bilateral—if the former, it is important for us to keep it in mind, for it will aid us in determining the cause of the anosmia.

Accompanying the loss of the sense of smell are symptoms

varying according to the etiology of each case. Thus we may have partial occlusion of the nose accompanied by more or less discharge in hypertrophic rhinitis, or mucous polypi, or offensive odor and formation of crust in atrophic, syphilitic or scrofulous rhinitis. And when due to central brain lesions we will usually have some peculiar symptom or condition indicating the nature of the trouble.

Maurice Raynaud reported a case in 1879 in which the loss of smell was periodical, coming on at 4 P. M. one day and lasting until 10 A. M. the next. The remainder of the twenty-four hours the sense was normal.

PATHOLOGY.—As each case may have a different cause, it may have a different pathology.

Two cases, reported by Bonet some years ago, were found after death to have abscesses of the olfactory bulb. He also reported another case, and this is quoted by McKenzie, who died nine days after an attack of high fever accompanied by severe headache and anosmia. At post-mortem, "a stone flattened like a coin but not so round was found at the base of the brain pressing on one of the olfactory nerves."

Several cases of congenital absence of the olfactory nerve have been reported by different European writers. Softening or atrophy of the olfactory nerve or bulb is occasionally found in post-mortems of patients suffering from this affection.

DIAGNOSIS.—The diagnosis of anosmia may be made by the use of such drugs as, oil of cinnamon or pepper mint, or by a well used tobacco pipe. The patient should not know the nature of the remedy used. You must remember that ammonia, snuffs and other preparations similar to these act simply as irritants and do not involve the olfactory sense. Hence they should never be used in making the test. Patients are frequently much more sensitive than normal, to irritants, after the sense of smell has been lost.

It is very important for you to diagnose the cause of the affection in order to treat it scientifically.

The rhinoscope will enable you to make diagnosis of the intra-nasal trouble, but you will be obliged to depend upon the appearance and symptoms of the case when making diagnosis of brain and nerve lesions.

PROGNOSIS.—Except when caused by acute rhinitis the prognosis should always be guarded. When due to obstruc-

tion, few cases fully recover—especially if the sense of smell has been lost for some time. In some cases in which I have removed the hypertrophy or polypi the sense of smell has returned for a short time, but coming and going at varying intervals.

TREATMENT.—The treatment as you will readily understand resolves itself into the removal of the cause.

When caused by acute rhinitis the condition usually subsides in from three to ten days and the sense returns. Hypertrophies should be reduced—this, I believe, can best be done by the galvano cautery; mucous polypi should be removed by the snare. In atrophic, syphilitic and scrofulous rhinitis the parts should be kept cleansed by the use of warm alkaline solutions, which should be followed by applications of stimulating sprays as menthol, iodine, carbolic acid, etc., from two to ten grains to the ounce of liquid alboline.

When due to nerve or brain lesions little can be done to relieve the trouble.

The applications of galvanism and faradism, to the nasal mucous membrane have been used by some in cases of true anosmia, but I believe them to be of little benefit.

McKenzie in two cases has derived benefit from the insufflation of strychnia one-twenty-fourth of a grain, powdered amyllum two grains, two times a day. This remedy was first used by Althus.

Raynaud cured the case of intermittent anosmia referred to in this article by the internal administration of quinine.

70 State Street, Chicago.

THE MAINTENANCE OF A UNIFORM ANIMAL TEMPERATURE. By
A. D. BARR, M. D., Calamine, Arkansas.

The means by which the body temperature is maintained at a uniform degree, has not been very satisfactorily accounted for, in my opinion, therefore the following investigation was conducted with a view to ascertain if possible, the laws by which body temperature is maintained at the same degree, during the varying degrees of the external temperature. The investigation consisted in passing the expired air through a spiral glass tube immersed in water, the temperature of which was prevented from being affected by the temperature of the atmosphere by placing the apparatus within a thick wooden box

and packing around it a non-conductor of heat, so that all the heat gained during the investigation was that imparted by the expired air. The observations were made in an external temperature varying from 0° F., to 60° F., and two observations were made on the same day so that the amount of vapor present in the atmosphere was the same; and the difference in the external temperature was due to artificial heat. When the external temperature was below that of the water in the apparatus, the heat still retained in the expired air was ascertained by a calculation based on the specific heat of air. My observations show that the amount of heat given off from the lungs is a uniform amount and has no relation to the external temperature; provided it be not lower than 28° below zero F. According to the observations made, there is an amount of heat given off from the lungs in twenty-four hours sufficient to raise the temperature of 1536 pounds of water 1° F.; or one pound of water 1536° F. If one pound of water is raised 1536° in twenty-four hours; one pound will be raised 16° in one-fourth of an hour. In accordance to the specific heat of air compared with water, an amount of heat sufficient to raise one pound of water 16° , would raise one-half pound of air 120° , which is the amount of air breathed in the above time, allowing eighteen respirations to the minute, and thirty cubic inches to each respiration. Of the 1536° of heat given off by the lungs 1000° are given off as latent heat in the form of aqueous vapor, and 536° by radiation. There is an amount of heat given off by radiation sufficient to raise the temperature of one-half pound of air $44\frac{2}{3}^{\circ}$ F., in fifteen minutes. The law by which the uniform animal temperature is sustained, when a greater amount of heat is required to raise the temperature of the inspired air is: the cool air coming in contact with the air that has been heated during the time it remained in the lungs, and also holding the latent heat of the aqueous vapor exhaled from the lungs; the aqueous vapor acts here as in all other places; and is more or less condensed by its contact with the colder air, according to the temperature of the latter; and in its condensation the amount of heat that was absorbed, or rendered latent in raising the water from the aqueous to the vaporous state again becomes sensible, and imparts its heat to the inspired air. There is an amount of heat given off from the lungs sufficient to raise

the inspired air from 28° below zero to the temperature of the blood, and the body at the same time sustain no loss. An amount of heat sufficient to sustain a uniform animal temperature in an Arctic region, where the temperature is lower than that in which the Greeley party wintered, at Cape Sabine; the temperature of which ranged from 5° to 10° F. The lungs being situated as they are can lose no heat except that imparted to the inspired air, the air being inspired always in a definite quantity, it logically follows that a definite amount of heat must likewise be given off.

When the temperature of the inspired air is 100° F., no heat can be given off from the lungs by radiation, for heat can not be radiated, unless there is a difference of temperature but if the amount of latent heat be increased one-third, the body will receive no heat from the inspired air. For this increase of latent heat will exactly balance that which is given off by the radiation; when the inspired air is of a lower degree, for example 0° F. If the latent heat of the expired air be increased to 2000° F., in twenty-four hours; or if the amount of aqueous vapor contained in the expired air be increased to two pounds in twenty-four hours; the body will gain no heat when the air respired has a temperature of $141\frac{2}{3}^{\circ}$ F., and all authorities agree that the lungs are capable of exhaling the foregoing amount of aqueous vapor.

There is given off from the surface of the body an amount of heat, in the latent form sufficient to raise the temperature of 2000 pounds of water one degree, and as the clothing of man, and the hair or fur of animals prevent the radiation of an indefinite amount of heat a condition of the surface analogous to that of the lungs is effected. The latent heat given off from the surface is converted into sensible heat, and serves to maintain a uniform temperature of the air immediately surrounding the body.

Thus the body is enveloped in a blanket of air that holds heat in a high degree in the latent form. The aqueous vapor contained in the air between the clothing and the surface of the body of man; or in the fur of animals, absorbs the heat to a great degree that is radiated from the body; thus preventing the escape of the heat radiated from the surface, also, the aqueous vapor in the air immediately surrounding the body moderates the extreme chilliness that would otherwise occur,

if some means were not provided to check radiation from the surface of the body, and raises the temperature of the air that is in close contact with the animal body. Thus the animal body constantly gives off a uniform amount of heat. The only difference in the means by which a uniform temperature is sustained, is, in hot weather the same amount of heat is given off, but in the latent form.

In cold weather the latent heat is converted into sensible. I do not claim that the foregoing calculations are absolutely correct, but that they are approximately so.

NOTE RELATIVE TO THE BUFFALO LITHIA WATER. BY WILLIAM A. HAMMOND, M.D.

There is a point in relation to the therapeutical efficacy of the Buffalo Lithia Water which has not as yet, I think, received sufficient attention. It is well known that many cases of diseases of the nervous system are complicated with lithæmia, and unless this condition is removed a cure is very often retarded and not frequently entirely prevented. It is quite commonly the case that in cerebral congestion producing insomnia, nervous prostration resulting from over-mental work or much emotional disturbance, and in epilepsy (to say nothing of many cases of insanity) an excess of uric acid in the blood is often observed. This state appears to be altogether independent of the character of the food, for no matter how careful the physician may be in regard to the diet of his patient the lithæmic condition continues. I have tried to overcome this persistence by the use of phosphate of ammonia and other so-called solvents for uric acid, but without notable effect.

Several years ago, however, I began to treat such cases with Buffalo Lithia Water with a result that was as astonishing to me as it was beneficial to the patient, so that now in all cases of nervous diseases under my charge in which there is an excess of uric acid in the blood, I use the Buffalo Lithia Water in large quantities. By this I mean that I do not have the patient drink merely a tumbler or two in the course of the day, but I flood him, so to speak, with the water, making him drink a gallon or even more, in the twenty-four hours. By this course the urine after a few days ceases to deposit uric acid crystals on standing, the morbid irritability of the patient

disappears, the tongue becomes clean, the wandering pains in the head are abolished, and the system is rendered much more amenable to the special treatment which may be necessary for the cure of the diseases from which the patient suffers.

I have tried carbonate of lithia dissolved in water of various proportions, but it certainly does not, in cases to which I refer, have the same effect as Buffalo Lithia Water.

Washington, D. C., January 25, 1892.

Clinical Reports.

TWO TRACHEOTOMIES ON THE SAME PATIENT. By C. A. POWELL, M. D., St. Louis.

On the 23d of December last, I was called to see Harrison B., aged four years, who presented a well matured case of diphtheria. From the labored respiration it was quite evident that the larynx as well as the pharynx was involved. The little patient had a metallic croupous cough, a temperature of 102° and a pulse ranging between 110 and 130. The obstruction was confined to inspiration alone, and there was no sinking in of the epigastrium, so I concluded to wait. The following day all the symptoms were greatly increased, tending towards greater obstruction, still the urgency of tracheotomy not pressing. Realizing that the narrowing of the air passage was only a question of time, and that the success of the operation was better if performed early, I telephoned Dr. H. H. Mudd the nature of the case, and asked his valuable assistance. The gentleman quickly responded, and a few hours later met me at the house. Doctor Mudd agreed with me that the case was not one of urgency but was of the opinion that the operation would be a necessity within six hours. The father of our patient, a very sensible man, when told of the gravity of the case, and the possible circumstances connected therewith insisted on an immediate operation, which was skilfully done by Dr. Mudd. Prompt relief followed all the distressing symptoms. Our little patient was given $\frac{1}{2}$ of a grain, corrosive sublimate in elixir calisaya and simple syrup together with free stimulation. During the two weeks that followed

large pieces of membrane were thrown off through the tube. This finally ceased, and at the end of the third week from the date of operation, the tube was removed, respiration being perfectly established. The little patient presented no further manifestations of the disease. The house was fumigated, and everything deemed serene. Dr. Mudd removed the tube, and one week later I returned the same to him from the patient's house. Two weeks after the removal of the tube, I was summoned suddenly in the evening to our patient, and found a worse condition of obstruction than in the first instance. When awake spasm of the glottis was prominent, but when sleeping there was a steady distressing whistling, breathing, the head thrown back, the *alæ nasi* in active operation, the intercostal muscles and diaphragm rising and falling plainly speaking in their action plainer than the little patient's piteous cries were for relief. The original opening in the trachea was entirely filled with granulation tissue. This projected anteriorly about a half inch, and I presumed that possibly the same proliferation may have ensued posteriorly encroaching on the trachea sufficiently to give rise to the present trouble. The necessity for relief was becoming momentarily more intense, so having no tube, I sent for the nearest medicus to come and bring one. Fearing that he was about to have a case of diphtheria in his own family the Doctor declined, but kindly sent a tube and telephoned for Dr. G. W. Broome. He arrived shortly afterwards, and finding the pulse very irregular and feeble agreed that the trachea should be reopened immediately. Dr. Broome selected as the best site the first entrance. He experienced considerable difficulty cutting through the cicatrix which was hard, extensive, completely filling the trachea, and cut like very thick leather. He *did not* cut into the *trachea*, it being almost impossible to do so, but having made a free incision in the cicatrix forcibly pushed the tube through the mass into the trachea. Instantaneous relief followed, and the following morning when I called I was surprised to see the little fellow sitting at the breakfast table with his sisters, two of whom had passed through the disease. I was still more surprised though to find that diphtheritic membrane in large quantities had been expelled from the tube. One ribbon over an inch in length gave rise to such a severe effort at ejection two or three days later, that I was called in the greatest alarm

to arrive and find the membrane without, and everything serene.

On the tenth day after the second operation, February 11, 1892, I removed the tube, as there had been no further discharge, except mucus, and patient has made a good recovery. The duration of the disease was six weeks and five days.

In thinking over this case, I have wondered how much the granulation tissue had to do with the obstruction and how much the recurrent diphtheria, or what part the two combined played. The extent of the proliferative material was certainly very great, as was also the diphtheritic membrane. Secondly. Was the diphtheritic membrane a new development or a remnant of the old disease. I think from the outcome of the former disease, the second attack was a recurrence. I am also of the opinion that the scar tissue would not *of itself* have given rise to the trouble without the presence of the membrane, but both together acted as potent factors.

I forgot to add in my history of the case that in the second instance obstructive symptoms developed three days before the trachea was reopened, and so gradual that the parents, attention was scarcely attracted to the condition.

In the past eight weeks I have treated consecutively nine cases of diphtheria, eight in children with three tracheotomies, two on the above case, and one on a child two years old, which died. The ninth case was an old colored woman eighty-eight years old. Of these nine cases, eight recovered. One of the children, a girl, has hip trouble, which I suspect is a sequel of the disease as she had nothing of the sort prior to the disease.

1423 Euclid ave.

The American Medical Association will hold its forty-third annual session at Detroit, Mich., June 7, 8, 9, and 10, 1892. Dr. J. S. Cain, of Nashville, Tenn., will deliver the Address in General Medicine; Dr. John B. Hamilton, of Chicago, Ill., the Address in General Surgery; Dr. Charles A. Lindsley, of New Haven, Conn., the Address in State Medicine, Dr. Henry A. Walker, of East Detroit, is the Chairman of the Committee of Arrangements.

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MEDICAL GRADUATES.

The present issue of the JOURNAL will have appeared after the annual graduation exercises of the majority of the regular medical colleges of this country and the usual number of medical graduates will have been invested with the legal qualifications to go abroad and practice medicine. From the present outlook it would appear that as large a number as for the past few years will be regarded as duly qualified and will look around them for the opportunities of earning a living at the outset from the revenues derived from the pursuit of their profession. All these are merely a repetition of the old story and its continuation will most probably be the same. In April, May and June the various state medical societies will hold their annual meetings and the usual number of members will be found to object at the over-crowding of the profession, and the same old cry of higher medical education will be heard in the land.

Despite all this, the colleges will keep on graduating young men and women in medicine and the accretion will steadily go on. All the resolutions that may be passed by medical associations, and all the higher medical education will avail naught unless the public be educated and the profession be taught that it lies in the hands of both of them to limit the output. It is too late to close the stable-door after the horse is stolen. As in hygiene, prophylaxis must be made to take

the place of cure. Prevent any desire to learn medicine and you will have fewer graduates. If the public were educated to the fact that, of all professions, that of medicine is the most difficult to acquire and the most unrenumerative as a general rule, the number of applicants to join the ranks of physicians would soon perceptibly diminish. And the ones best qualified to do this are without doubt the physicians themselves, as they are certainly full of experience in regard to the practical bearings of the question.

It is true that there are eminent medical men who have made fortunes, and who are, to-day, earning wealth and glory. So are there illustrious generals and yet how few there are who enlist with the purpose of becoming commanders of army corps. The very fact that the men, eminent in the profession can be so glibly given is a proof of the fact that they are so few in number. Of course, "there is always room at the top," but those who strive to arrive there are very apt to find it diminishing in a geometrical ratio, and, in many cases, with so much rapidity that it looks like a geometrical point.

The medical graduate, full of his recently acquired knowledge and fuller still of high ambitions and aspirations realizes but little of the pathway lying before him. Armed with the most recent advances made in medicine, proud of the new position he has acquired, he little recks of the days of tedium and enforced inactivity lying before him. It will take some months for him to begin to realize that the roseate hue presented to him by his anticipated future was seen by reflected light, such as was afforded by the successful careers of his teachers. The dark and dismal visions afforded by the experiences of the thousands who have failed do not present themselves and are a *terra incognita*, and were they known, could not deter the young and ambitious spirit so anxious to try its pinions and soar the empyrean. And, unfortunately, like the son of Icarus the too hot sun of professional competition and jealousy is more than fatal to the contemplated flight which ends in ignominious failure.

Yet we must have new men in the profession. The hiatus which is caused by the disappearance of a physician must be filled up; and not only this, but a sufficient accretion must occur to meet the wants created by the demands of increasing population. But the supply must not be so large that it

creates a struggle for bare existence ; nor must it create such a number and quality as to force them to the necessity of going about and hawking their talent and abilities like a huckster does his wares.

Such is certainly not the intent and purpose, nor were medical graduates ever taught this by precept or examples during their under-graduate career. But when needs must, e'en the devil eats flies. So that we find ourselves driven back to our first proposition. The physician's duty is to educate the public in the true state of affairs, not those which surround the successful doctor, but those which harass the ordinary practitioner. Fond parents will no longer see Astley Coopers in their sons, nor expect each one in a few years to be opulent and renowned. They will find many more lucrative careers open and which are as honorable although perhaps not invested with a title. But 'twere better to have no title than one unsupported by worth and honor, as well as success and its necessary accompaniments.

In conclusion, we desire to state that while there may be too many doctors, there certainly are not too many good ones and it is probably the preponderance of the latter which is leading up to the dismal cry of the purported "overcrowding" of the profession.

EDITORIAL NOTES

A PHYSICIAN'S LOT is not a happy one if we are to believe Dr. John P. Blankenship. He states (*Nashville Jour. of Med. and Surg.*) that the true physician seldom ever sees happiness or enjoys that comfort that others do. The incubus of fashion and conventionality among the people prevents the working physician from engaging in the pleasures of life socially, for professional and studious habits must be adopted by the successful physician. The sick under the care of every physician must be attended to regardless of everything else. But few of the profession grow rich in this world's goods. The duties and responsibilities upon him who goes forth to battle disease is paramount to gold. While the physician may not be appreciated by the people generally, quacks may succeed, but the time is coming when the scientific and educated man will. The medical men of the country have their own destiny in their hands, and all quackery, fanaticism, and humbuggery

will pass slowly away. The people, our patrons, are thinking of living physically, and none expect to die spiritually. The place to educate our people is the free schools, colleges, and universities, and all these institutions, erected for educational purposes, should teach the children of the State something of their physical condition, which will elevate the morals of the people. At this time all the nostrums that have been made are being used daily with a view of curing some conceived ailment that never existed only in the mind of the victim. Advertised humbuggery is gold. Let the profession speak out, the heavens will not fall, but the rising star of honorable medicine will shine, and the duration of human life will be extended for many years when mystic disease preys upon the physical man.

REGULAR EXERCISE for Physicians is certainly a necessity. Dr. T. T. McCoy very truthfully observes (*South. Cal. Pract.*) that no class of men recognize the dangers of a sedentary life as physicians : and they prescribe the proper remedy for their patients, but fail even here to take their own medicine and make a personal application of their wise advice. On considering the reasons to explain this condition of affairs, they are easily found in the customs and conveniences of the present day ; and we encourage, he fears, the common error of popular belief : that exercise and a proper amount of dignity, such as becomes the medical profession, are incompatible. The popular conception of a physician, as he learns—as conveyed to him by the laity—is that of a gentleman who wears a silk hat, a Prince Albert coat, a pair of gloves, quite dignified in manner and dress, and rides in a buggy or carriage to make his professional visits. The result of such opinions is a sallow, dyspeptic physician, or one who is an habitual user of alcoholic stimulants ; or else, he who takes considerable exercise. He has known doctors who were leading athletes while in colleges, settle down to the sedentary life of a medical man : and the result has been, almost without exception, that in a short while they have become accustomed to produce their wonted exhilaration by means of stimulants, and the ultimate result has been most unfortunate. Is it not a fact, that one reason for the widespread custom of taking stimulants, by those who lead sedentary lives, is to be found

in the neglect of bodily exercise? 'Tis natural for us to desire and enjoy that feeling of exhilaration and stimulation which follows exercise in the open air. Busy men find it inconvenient, and impossible often, to take the time, and resort to alcoholic stimulants to produce the feeling of vivacity; otherwise their lives would be splenetic, low-spirited, and even hypochondriacal. Customs of to-day demand—and we are willing victims—that in proportion to a man's success, he must live more luxuriously; and nature demands more exercise. Want of it and the costive habit superinduced, may, as Kotzeber observes, "extinguish the divine flame of genius and seriously impair the intellectual powers." From the moment we are born until the end of life, exercise duly apportioned to rest, is the normal state of existence; and while continued over-strain of any portion of the body is a forerunner of disease, so on the other hand is, equally if not more so, that want of exercise which induces wasting and degeneration.

THE FEMALE PHYSICIAN is an institution and has come to stay. A correspondent of the *Times and Register* says that the woman is the best student; she comprehends her task more quickly, and her memory is more retentive. She is more attentive as a listener, and devotes herself to her studies with more enthusiasm, more singleness of purpose, than the male student. In competitive examination she excels all but the very best of the men; the average woman ranking higher than the average man. But there she stops. When she attempts to put her book-knowledge into practice, she is helpless. So is every young graduate, comparatively; but the man gets over this—the woman don't. In all that distinguishes the true physician beyond the scholar, she is, and remains, deficient. Many a country practitioner never sees a patent splint, but with his jack-knife whittles out of a shingle a better apparatus for the case he is treating than he could obtain from Tiemann. This mechanical aptitude is an unknown quantity to women. They insert a pessary, but it doesn't fit; a tampon, and it is too little; and they never know why they have failed until they have asked some man. They do well enough when their way is plainly marked out; but when left to their own judgment they fail. In the great emergencies of

practice, when the indications are dubious, the authorities shed but a doubtful light on the subject, and life or death hangs on the decision, the woman is morally certain to adopt a vacillating, tentative method, that is sure to end in disaster, unless she has a man's advice to fall back upon.

She is Brahminical in her methods, and given to transmitting her lore by word of mouth, disdaining to put her observations into print. Excepting one grand woman who combines all that is good of the masculine and feminine intellects in her single person, there is no medical literature derived from the female physician.

THE RELATION OF MEDICINE TO SOCIOLOGY has occupied much of the attention of modern writers. The following statement is made in the *Lancet-Clinic*: The science of medicine is so comprehensive a subject that it extends more or less into every phase and condition of people. To consider the art of prescribing for the relief of the various diseases as of paramount importance is putting a very low estimate upon our noble profession, for it is in this branch that we find the hiding-place of empiricism, quackery and narrow-mindedness. Beyond and above the mere prescribing of drugs we find that physicians, from their peculiar studies, must become participants in the grandest and most occult questions of the day.

The present status of society is not perfect; the future must bring about many reforms, and we, as physicians, have a better opportunity for becoming leaders of advanced thought than perhaps any other body of men. From the very nature of our calling we must be prepared to act as advisers to the class of people who receive the less pleasant parts of our social system. A double advisory function is ours, for we must not only point out the way of advance, but we must especially advise against actions and theories that will lead to results not all desirable. The latter function is the easier one, but it requires much good judgment and tact to instill into others the results of our practical experience and trained observation. It is only through experience and circumspection that we shall be able to be of use in these highly important and burning questions of the day.

Microscopy.

The Destruction of Micro-Organisms by Amœboid Cells.—In a lecture recently delivered in the theater of the College Laboratories on the Embankment (maintained by the Royal Colleges of Physicians and Surgeons), Dr. Armand Ruffer gave an account of some further researches which he had made on the destructive action of amœboid cells on micro-organisms. The result of these further observations, he said, was to confirm him in his former opinion, that the destruction of micro-organisms in living tissues is accomplished by the cells of the body, and by the cells only. His recent experiments were all made with the virus of quarter-evil, the *bacillus Chauvæi*. Instead, however, of using guinea-pigs, which took the disease readily, he inoculated rabbits, which were immune against quarter-evil, and therefore lent themselves well to the study of the effects on this virus of the living fluids and cells. If the immunity of rabbits was due to the fluids of the body not furnishing sufficient nutritive material, the bacilli of quarter-evil ought not to grow at all—or but sparingly, at any rate—in those animals. If the immunity was due to some bactericidal power possessed by the rabbit's fluids, then degenerated bacilli should be found in the fluids near the point of inoculation. If, on the other hand, the rabbit's resistance was due to the action of the animal's cells, and not to the action of fluids, then the bacilli should grow freely in the fluids of the animal's body, but degenerate in the interior of amœboid cells.

Dr. Ruffer found that both in guinea-pigs and immune rabbits the bacilli commenced growing as soon as they were introduced, and that the leucocytes gathered to the spot where the micro-organisms had been introduced. The leucocytes were attracted to the spot by the chemical poisons secreted by micro-organisms, and they violently attacked the latter, took them into their interior, and destroyed them. The cellular emigration at the point of inoculation varied inversely to the quantity and strength of the virus introduced, but was in proportion to the length and curability of the dis-

ease. When a large quantity of extremely virulent bacilli was injected, the emigration of leucocytes was slight or totally absent, but it was more marked when only a few virulent bacilli were introduced, or when the quantity of virus introduced being large, its virulence had been previously diminished. Whenever, from any cause, mechanical or chemical, the leucocytes were prevented from reaching the virus, the disease invariably progressed and the animal died. (This was well demonstrated when, after enveloping the virus in filter paper and allowing it to remain under the animal's skin, the protection of the paper was removed.) When the leucocytes were repelled by the action of lactic acid on one side of the body, the disease only developed on that side, and when the cellular emigration was arrested by injecting the bacterial poisons into the blood-stream, the disease progressed with an appalling rapidity. What was observed with regard to cellular emigration, however, by no means applied to the other necessary accompaniment of inflammation, viz., exudation; it would rather appear as if the two stood in some inverse relation to one another. Compare, for instance, the thin sanguineous exudation of a rabbit dying in twelve hours from the inoculation of the *bacillus Chauvxi*, and the thick, tenacious material which accumulated around the virus inoculated into a resistant animal. Was that not sufficient evidence that, in that disease at least, exudation of fluid was always more marked when the disease was more virulent? But in spite of the enormous quantity of this exudation (supposed by some to have strong bactericidal powers) there was not a sign that the micro-organisms were injuriously affected by it; on the contrary, they grew and thrived excellently well.

Another point which stood out clearly was that, when once the animal substances produced by a micro-organism had penetrated into the blood, the poisons secreted by the same micro-organism in other parts of the body failed to attract leucocytes. Thus, on injecting a drop of the culture of the *bacillus pyocyaneus* into a rabbit's eye, the leucocytes migrated to the spot in large numbers; but when the poisons produced by this bacillus were already circulating in the blood, the leucocytes no longer left the vessels. The same result was obtained when the *bacillus Chauvxi* was injected both subcutaneously and intra-venously. In the case of the

bacillus pyocyaneus, there was some evidence to show that the leucocytes were actually paralyzed, for Charrin and Gamaleia had found that the application of croton oil to the ear of an animal poisoned with the products of the *bacillus pyocyaneus* was not followed by inflammatory reaction at the point where the oil was applied. This explanation, however, did not hold good for the results obtained with the *bacillus Chauvæi*. Here the leucocytes in the blood-vessels and the spleen were extremely active, but absolutely powerless to emigrate into the surrounding tissues, in order to attack bacilli of the same species. Their absence of emigration, however, was not due to some change in the vessel-wall, for the leucocytes left the vessels to attack another bacillus—*bacillus pyocyaneus*. Similarly the leucocytes of an animal suffering from anthrax declined to attack anthrax bacilli, but cheerfully accepted any other diet offered them. Here, again, the refusal to emigrate was not simply due to spasm of the vessels or any other vascular cause, as these same cells emigrated freely when any other stimulus was applied. The reason for these apparent anomalies was that, so long as the chemical substance which attracted the leucocytes was present outside the vessels only, the cells emigrated to the spot where this chemical substance was to be found; but as soon as this chemical substance was present in equal or larger quantities in the vessels as in the surrounding tissues, the leucocytes no longer attempted to leave the vessels.—[*Medical Record*.

The Fuchsinophile Plastidules or Bioblasts of Altmann.

III.—The Protists.*

BACTERIA.—By reason of the particular position which the organisms of this group occupy at the head of the plastidular theory (of the bioblasts of Altmann), it is interesting to verify the questions whether, by following Altmann's methods, they behave like associated plastidules. Altmann has stated that in the preparations of Zimmermann he had found, in the great majority of cases, at least, that bacteria present the coloration of plastidules. Fixed and mounted by the method previously indicated,¹ along the edges of zooglea (from an infusion of hay),

*By Doctors L. and R. Zoja. Continued from the March number.

1. See March number ST. LOUIS MEDICAL AND SURGICAL JOURNAL, page 158 *et seq.*

in colonies of micrococci, and in cultivations developed upon potatoes, the organisms also present the characteristic coloration.

The objection might be made that in these cases there had been insufficient bleaching, but in every instance the action of the hot picric acid solution had been prolonged according to the accepted regulations. The preparations the most clearly demonstrative, are those which it is possible to compare directly with those of plastidules of some tissue. Sections of the digestive tube are those most easily employed for this purpose. Thus in sections of the great intestine of the frog, the bacteria comprised in the lumen of the canal (and recognized as such on control preparations made after Gram's method), presented a coloration identical with that of the cellular plastidules. In the intestinal mucosa, also, the staining had succeeded perfectly, the nuclei and nucleoles being bleached in a typical manner. Some micrococci and spirilla colored like the plastidules of the intestinal epithelium, were found in the intestine of lizards, of tench, hydrophyles, aulostomum, etc. In other larger bacilli (from the intestines of aulostoma, hydrophyles, etc.), the red staining is confined to the median portion, the two extremities preserving only that yellowish color presented by the interplastidular substance and cell nuclei. In the median, red portion we note certain clear spaces separated from each other by red trabeculæ and marked with dots. A similar staining indicates a complicated structure, now generally admitted to exist in these forms of bacillus. It would be interesting to see whether bacteria will take on a stain from cyanin, the material used by Altmann to demonstrate the plastidules of the nucleus. We did not try this experiment simply because we were ignorant of the technique employed by Altmann in making the staining referred to. It seems altogether probable, however, that the stain would take well on bacteria, provided the latter presented in their living, free form, plastidules in association having in themselves the substances which afterward localize themselves, the associated plastidule of the nucleus and of the cellular body (caryoblasts and cytoblasts), and which present, probably, reactions between each other.

LOBATES.

Amœba Limax.²—The plastidules are sufficiently numerous, rounded or elongated, of uniform thickness, small, and, with certain forms, equally distributed throughout the cell; with others more abundant on one side, or around the nucleus. If vacuoles exist they can always be seen in the midst of them. In pseudopods the plastidules are sometimes found surrounding the entire periphery even to the very extremities, though ordinarily pseudopods are free from plastidules—a fact which also applies to certain scattered portions of the cellular body.

The fact that we sometimes find plastidules at the extremities of pseudopods suggests with a show of reason that the elements rendered visible in *amœba* by staining after Altmann's method are not of the same nature as the protoplasmic granulations that are visible without the employment of reagents.

Other *amœbæ* (from the great intestine of the lizard) having length of nine mikrons, possess plastidules of a much larger size. These are rounded or slightly elongated, very numerous, distributed through the entire cellular body and in the vacuoles.

FLAGELLATES.

Monads found in great numbers in the latter portion of the small intestine of the lizard.

2. In order not to lose these objects in the necessarily frequent changes of fluids used in preparing them for observation, and in order to obtain very delicate sections, the following technique, which has succeeded admirably in our hands, should be used. The upper stratum of the liquid contained in a vessel provided with fluid containing large quantities of *amœbæ* is drawn off into a test tube. Pour on it the usual osmio-bichromate solution and let it stand for twenty-four hours. One may encounter a slight difficulty in making the various changes of liquids—water, alcohol, xylol, etc., but after a few attempts, taking care to agitate the tube from time to time and to decant only after all solid particles have fallen to the bottom, the task will be found to be quite simple. The medium (the liquid and the fixing mixture) being thus decanted, follow it with pure alcohol and this with xylol. The usual xylol and paraffin mixture comes next, all of course being turned into the same test-tube in the order named after careful decantation. When finally the mass is sufficiently penetrated and that it is completely reassembled at the bottom of the tube, the embedding material of xylol paraffin is allowed to congeal. The test-tube is now broken and the part containing the *amœbæ* is cut away from the mould and transferred to a small capsule containing pure melted paraffin. After letting stand long enough, in a warm medium, to drive off the xylol, the pure paraffin is allowed to solidify. The mass is removed from the capsule, and again that portion containing the *amœbæ* is cut out and placed into the small moulding box of the microtome, which contains paraffin in a state of incipient congelation. The whole now rapidly solidifies and the material is ready for sectioning. The subsequent treatment is the same as ordinarily practiced where the material is stained, etc., on the slide. Of course, this treatment answers equally well for pseudopods, ciliates, etc.

In certain individuals especially those presenting large vacuoles, we may observe a mass, usually in the form of a horseshoe, which takes on an intense red (under staining with fuchsin), situated at the extremity opposite the flagella. In place of this mass we sometimes find much smaller red spherules. When there are no vacuoles, toward the enlarged part we find little plastidules which give a diffused rose tint to the region.

In other flagellates (from the intestines of the frog, monads of the zooglœa type) we find a little mass which stains an intense red, and sometimes little scattered plastidules. Among these latter we frequently find much larger red granulations.

F. L. J.

[TO BE CONTINUED.]

Dermatology and Genito-Urinary Diseases.

The Use of Alkalies in Pruritus.—Lange mentions four cases of obstinate pruritus of the genitals and of the whole body, which had been treated for years without success with all the usual remedies (*Satellite*). He found that the urine of the patients was loaded with uric acid and urates, and obtained a full cure by the continued use of alkalies, such as bicarbonate of soda, carbonate of lithia, and alkaline waters. While the distressing symptoms were alleviated a few days after the beginning of the treatment, it was necessary to continue it for some months in order to obtain a complete cure.

Gonorrhœal Cystitis.—Du Mesnil (*Virchow's Archiv*) denies that there is such a thing as specific gonorrhœal cystitis. When gonococci are found in the urine, they have, in all probability, entered with urethral pus, and are not new products developed from true specific inflammation of the vesical mucous membrane itself. In women pus from the urethra or vagina might easily get into the bladder in this manner. Du Mesnil maintains, on the strength of fresh researches, that gonococci can not alter the composition of the urine, and that cystitis with ammoniacal urine is not produced by these germs. Indeed, the urine renders the gonococci harmless or kills them entirely.

Leprosy.—Loefft (*Centralbl. f. d. Med. Wiss.*), has found bacilli in anæsthetic spots in four cases of pure anæsthetic leprosy, the cases representing four stages of the malady from two to seven years' duration. The portions of skin examined were excised from the periphery of the spots. In the sections from the old patches the bacilli were very few in number. In no case were bacilli found in the muscles in which the fibrillæ had undergone fatty degeneration.

Acne.—Monin advises the following preparation to be used in so-called confluent acne :

R	Zinci oxid.	.....	℥ij
	Aluminis	.....	gr. xlviij
	Tinet. sapo viridis	.....	℥ss
	Glycerini	.....	℥ij

M.

Sig.: Apply morning and evening.

In addition to this a tablespoonful of equal parts of castor oil and pure glycerine should be taken, before breakfast, every second day.

Snuff for Infantile Syphilis.—The following is recommended by a French writer :

R	Hydrargyri protiodidi	.....	gr. iij
	Ferri lactat.	.....	grs. viijss
	Pulv. sacchari	.....	℥ij

M. et ft. chart No. 10.

Sig.: One to three of these powders are to be snuffed daily.

This combination is said to act well in infantile syphilis, although its composition would suggest that it is likely to produce irritation. A caution to observe is to be certain that the mass is well triturated.

The Skin in Infantile Diseases.—The following résumé is given in the *Denver Medical Times* by Dr. E. Curtis Hill : The surface capillaries are congested for the first week or two of life. Icterus is common during the first and second weeks. Prolonged lividity may be due to atelectasis, malformation of heart or great vessels. Acute lividity is caused by obstructive respiratory diseases. Both the acute and chronic forms indicate imperfect decarbonization of the blood. Perspiration is scanty in the child ; sebum more abundant. Profuse sweating of the head and neck, more especially during sleep and without fever, may be charged to rickets, to which may also be as-

cribed badly formed nails curving and clubbed with long marks. Bulb ended fingers and incurvation of nails are due to the cyanosis of heart malformation, tuberculosis or chronic pulmonary diseases.

The complexion of disease has a tale to tell. It is dirty white in congenital syphilis; sallow in splenic disease; a muddy sallow in scrofulosis and glandular abscesses; livid, leaden or earthy tint in abdominal collapse; pallid and with dark hair in neurotic children; livid or ecchymosed in respiratory obstruction such as whooping cough; and thin and pretty with a subhint of pallid blue in tubercular subjects. The cheeks are flushed in cachexia and fevers and inflammation. Transient circles of congestion upon the face, ears or forehead are a sign of cerebral disease. The limits of the article do not permit him to consider the exanthemata and skin disease proper.

Chromic Acid in Syphilitic Ulceration.—Dr. Ernest Feibes confirms the great value of this remedy (*Pract.*), as pointed out by Schuster, Vidal, Butlin and others. He states that he always uses chromic acid in the local treatment of syphilides of the mucous membrane, and with results to be obtained by no other methods, so that the application of the nitrate of silver point falls more and more into disuse. A case is quoted of a man who had already been treated for several weeks, on account of specific ulcers of the tongue, with mercurial pills and the local application of nitrate of silver. The result not being satisfactory the patient was put through a course of inunction, and the parts touched with the silver point. No change being perceptible within ten days, a solution of chromic acid (one to two) was used locally. After the application the ulcer was seen covered with a yellow pellicle, which separated in two days, showing the affected part much smaller; and complete healing occurred within eight days, the ulcer being touched every second day. Ten cases of broken-down gummatous nodules of the tongue were treated with chromic acid and did extremely well, healing in a much shorter time than with the nitrate of silver treatment. The application is but slightly painful, though the taste is very objectionable. Mucous patches are rapidly removed by the chromic acid solution. Feibes has repeatedly seen them disappear in two to three days. A similar result is obtained in

cracks around the angle of the mouth. One of the most obstinate forms of syphilis of the mouth, the specific *lingua geographica*, is affected by no treatment so readily as by this. In such a case, the tongue was carefully dried with cotton wool, and so isolated, after which concentrated chromic acid solution was applied by means of a brush, allowed to remain on for some minutes, and then washed off with acetate of aluminium solution. In three days, the neurotic tissue had separated displaying the normal looking tongue. Five such applications within fourteen days sufficed for a complete cure. Eleven cases of lingual psoriasis were likewise treated satisfactorily. When warty irregularities were present, they were first scraped with the sharp spoon, and when the bleeding had ceased, touched with chromic acid. Finally Feibes had found the acid very useful in mercurial stomatitis. Here a fine sound, carrying cotton-wool, is introduced between the tooth and the gum, and the foul matter carefully removed. Another sound dipped in concentrated chromic acid solution is then inserted between the gum and tooth, and the patient directed to use acidulated chloroform water on account of the disagreeable taste. The method has yielded most excellent results.

O-D.

Meeting of Medical Societies.—The following is a partial list of the meetings which will take place in May and June, 1892:

- American Medical Association, Detroit, June 20.
- Colorado, Denver, June 21.
- North Dakota, Grand Forks, May 28.
- South Dakota, Salem, June 8.
- Illinois, Vandalia, May 19.
- Indiana, Indianapolis, May 12.
- Iowa, Des Moines, May 18.
- Kansas, Fort Scott, May 3.
- Michigan, Flint, May 5.
- Minnesota, St. Paul, June 15.
- Missouri, Pirtle Springs, May 17.
- Nebraska, Omaha, May 10.
- Ohio, Cincinnati, May 3.
- Oregon, Portland, June 2.
- Wisconsin, Milwaukee, May 4.

Excerpts from Russian and Polish Literature.

Ichthyol in Endometritis.—At a recent meeting of the Kiev Obstetrical and Gynecological Society, Dr. N. P. Mariantchik (*Vratch*, No. 7, 1892, p. 165) read a paper on the ichthyol treatment of endometritis, with notes on twenty-nine cases (ten cervical, nineteen corporeal). Having cleansed the diseased mucous membrane with dry hygroscopic cotton-wool, the author either injected sulpho-ichthyolate of ammonium into the cavity (by means of Braun's syringe), or introduced a fine sound with cotton-wool soaked in the drug. In the intervals he made irrigations, using either plain water or a from two to four per cent. solution of ichthyol. The author has come to the following conclusions (which greatly differ from those reached by Professors Freund and Braun, Drs. Kotschau, R. Bloch, Reitmann, Schonauer, Ramolo Polaco, Schaut, Massen, I. Fessler, and many other observers.—*Reporter*): 1°. Ichthyol does not manifest any curative influence whatever on either gonorrhœal or hæmorrhagic endometritis. 2°. Repeated injections of an aqueous solution of boracic acid and an internal administration of liquid extract of *hydrastis canadensis* give much better results in such cases. 3°. In cases of cervical erosions ichthyol is inferior to empyreumatic acid (*Acidum Ligni empyreumaticum*, *Acidum vel Acetum pyrolignosum*). 4. The supposed destructive action of ichthyol on the *streptococcus pyogenes* and *staphylococcus pyogenes aureus* is of no practical value whatever, since the microbes are embedded deeply in the uterine muciferous glands, the drug being unable to penetrate into the latter and to reach the cocci. 5°. On the whole, the therapeutic effect of ichthyol is limited to allaying pain (provided, the application is made repeatedly). During a discussion, Dr. Isidor Woff said that, contrary to Dr. Mariantchik, he had obtained good results from painting with ichthyol in cases of uterine hæmorrhage caused by endometritis.

Wild Rosemary as a Diaphoretic.—Dr. Iwan A. Sznabl (pronounced *Schnabl*—a Polish name), of Warsaw, draws attention (Reprint from the Polish *Medycyna*) to the powerful diapho-

retic effects of the wild or marsh rosemary (*Ledum palustre* L., *Rosmarinum Sylvestre* Syr.; Russ. *bagulnik* or *klopovnik*, "bug-weed"). The herb should be gathered during its blooming time, immediately dried, powdered and put into some hermetically closed vessel. It should be administered in the shape of an infusion, the diaphoretic dose varying from one and one-half to three drachms (of the powder).

[The remedy is derived from the Russian and Polish popular medicine, in which it is similarly used for sweating purposes. It has been introduced into scientific medicine by Swedish doctors (by Ohdelius in 1774, and Linné in 1775) who recommended the wild rosemary especially as an expectorant. Later on, the herb was employed internally in spasmodic affections, anginas, diarrhoeas, and whooping-cough, and externally, in the form of baths or compresses) in cutaneous diseases, rheumatism, and gout. Since time immemorial it was largely used for destruction of moths, bugs, fleas, and such like insects. It is said that brewers occasionally add the wild rosemary to beer in order to intensify its intoxicating action, the herb possessing pronounced narcotic effects. According to Meissner and Willigk (*vide* Dr. Hermann Hager's *Handbuch der Pharmaceutischen Praxis*, Vol. II., p. 348, and Vol. III., p. 662; and Prof. Julius Trapp's *Handbook of Pharmacognosy*, Vol. I., p. 252), 500 parts of the herb contain 7.8 parts of an essential oil of a strong narcotising or "stupefying" odor; 34 of leditannic acid (*acidum leditannicum*), giving a green precipitate with iron salts; 34 bitter extractive substance; 20 ulmin; 37.5 resin; 23 brown pigment matter, 186.5 gum; 15.0 glycose; 57 chlorophyll; as well as citrates, acetates, malates, formiates and valerianates of potassium and calcium. Rochleder and Schwarz found, besides, ericolin ($C_{68}H_{56}O_{42}$), a bitter substance. Ivanoff and Prof. Trapp succeeded in isolating a ledum camphor ($C_{20}H_{34}O$). The latter and the narcotic essential oil are most abundant (in the leaves and summits of the twigs) before the period of blooming. As far as we know, no physiological experiments with the herb have been made up to the present, though the old popular remedy certainly deserves the attention of pharmacologists.—Reporter].

Antipyrin, Salicylate of Sodium and Salol in Cholelithiasis.—In the *Meditzinskoïe Obozrenië*, No. 1, 1892, p. 56,

Dr. M. A. Strizover, of Odessa, emphatically recommends the following method of treatment of gall-stones, which he has been practising with uniform success for some years past. Given a case of biliary colics, antipyrin, in the dose of ten grains, should be administered, the dose, if necessary, bearing to be repeated in an hour. After the pain has subsided (which occurs, as a rule, in from ten to twenty-five minutes after the first dose, and never later than in as many minutes after a second), either salicylate of sodium or salol should be given, in ten-grain doses, from three to four times daily (the former drug should be best prescribed in an alkaline solution, *e. g.*, with Vichy water; Salol, in powder). The administration must be continued regularly day by day for months. The attacks of colics become much less intense and much less frequent and, with time, cease to recur altogether, while the swelling in the gall-bladder region gradually decreases, etc. The writer believes that the salicylate and salol not only promote the expulsion of concretions from the gall-bladder, but even inhibit the formation of biliary calculi.

[In 1883 Professor S. V. Levasheff, of Kazan, published (in the *Ejenedelnaja Klinitcheskaia Gazeta*; see also the *Zeitschrift fuer Klinische Medicin*, Vol. VII., fasc. 2, and *Deutsches Archiv fuer Klinische Medicin*, Vol. XXXV.) an important paper in which he draws attention that salicylate of sodium affords the most powerful chologogue and bile-liquefying agent of all yet known. Later on (*Ejened. Clin. Gaz.*, 1884; and *Virchow's Archiv*, 1885, Vol. X, fasc. 1) he proposed the treatment of cholelithiasis by the internal administration of the salicylate dissolved in some natural alkaline water or an artificial alkaline fluid. Quite recently he stated (*Meditz. Obozrenië*, No. 23, 1891, p. 1009) that he had tried the method in a number of most refractory cases of gall-stones, and that with excellent results, the colics gradually subsiding to disappear ultimately altogether. The same remedy, given from 0.25 to 0.5 gramme, from four to six times a day, proved to be brilliantly efficacious in cases of catarrhal jaundice (however severe or inveterate). Of late, the salicylate treatment of cholelithiasis was most highly spoken of by Prof. Stiller (*Wiener Medicinische Presse*, No. 1, 1890), Siegfried Rosenberg (*Berliner Klinische Wochenschrift*, No. 48, 1889), Fuerbringer (*ibid.*, No. 16, 1891), Professor Germain

Sée (*La Médecine Moderne*, Nos. 10 and 46, 1890) and Dujardin-Beaumetz (*La Semaine Médicale*, No. 51, 1891).—*Reporter*].

Red Bilberry in Chronic Articular Rheumatism.—Dr. F. I. Tchirtzeff, of Kuersk (*Proceedings of the Kuersk Medical Society for 1891*, p. 491), says that following the recommendations by Mr. Sanin and Dr. Th. Th. Hermann (*vide* the *ST. LOUIS MEDICAL AND SURGICAL JOURNAL*, August, 1890, p. 106) he resorted to the internal administration of a decoction of the red bilberry (*Vaccinium Vitis Idæa* L.) in a very severe and obstinate case of chronic articular rheumatism of fifteen years' standing. Both of the knee-, hip- and shoulder-joints, and the right elbow, wrist and hand articulations were swollen and exceedingly painful and tender; the patient (a gentleman) having been bed-ridden for many months. During fifteen months he had been assiduously treated by the internal administration of salicylate of sodium, salol, antifebrin, and iodide of potassium, as well as by baths with chloride of sodium, anodyne ointments and lotions, etc., but everything had failed to afford any relief. After a few first doses of the red bilberry decoction the articular pain markedly lessened; in a fortnight the patient was able to get up and walk about his room (though yet with some difficulty); after a three weeks' treatment there remained only a slight vague pain and some stiffness about the right shoulder and elbow joints, while all other symptoms vanished tracelessly.

Analyzing his remarkable case, Dr. Tchirtzeff points out that 1°. the red bilberry is actually a valuable remedy for chronic rheumatism; 2°. its curative effects should be attributed, probably, to its strong sudorific and a slight diuretic action; 3°. the latter is dependent upon arbutin present in the herb; 4. owing to its containing tannic acid, the red bilberry is apt to induce some costiveness of the bowels; hence it is advisable to combine the decoction with this or that mild aperient.

[Dr. Tchirtzeff's hypothesis concerning the *modus medendi* of the old Russian popular anti-rheumatic remedy in question is hardly correct. The matter is, very likely, more complicated than he thinks. For, if the cure is dependent simply upon the diaphoretic and diuretic effects, how would he explain the failure of the salicylate and other means in his case?—*Reporter*.

VALERIUS IDELSON, M. D.

Berne, Switzerland.

Medical Progress.

THERAPEUTICS.

Cough of Influenza.—For the dry, ringing cough of influenza the following is a good combination (*N. C. Med. Jour.*):

℞ Syrupi plics.....	℥jss
Spts. ammoniæ aro.....	℥ss
Syrupi pruni virg.....	℥jss
Potassii iodidi.....	℥ss

M.

Sig.: Teaspoonful two to four hours apart.

An Excellent Injection in Acute Gonorrhœa.—The following injection comes highly recommended in the acute stage of blenorrhœa:

℞ Zinci sozodalat.....	gr. xx.
Tinct. opii.....	℥jss.
Aquæ distil.....	℥ viij.

M.

Sig. To be injected four or five times in the course of the day.

In the vaginal blenorrhœa of females imbibe tampons in the solutions and place in the vagina.

Old Leg Ulcers.—The following is the treatment pursued by Dr. Charles P. Elwert (*Med. Sum.*): Cleanse the ulcer by irrigating with a solution of corrosive sublimate, 1 to 5,000. Then dry thoroughly with absorbent cotton, and apply daily the following powder:

℞ Iodoform.....	℥ss
Sulph. cinchonidia.....	℥j
Wood charcoal.....	℥ijss

M.

If any discharge appears after applying the powder, use absorbent cotton before applying the powder again. Advise the patient to rest and to keep the leg elevated. Keep the bowels regular with a mild laxative, and give some stimulating tonic to improve the condition of the general system.

Treatment of Grippe.—La grippe is characterized by a marked depression of the spinal cord affecting its various branches. Heart failure, pulmonary congestion, gastro-intes-

tinal troubles, and the various neuralgias which appear in this disease are all reflexes from a semi-paralyzed state of the spinal cord and a general lack of bodily tone in consequence. Wm. R. Warner's Pil. Chalebeate compound is almost a specific in la grippe or influenza. As an excito-motor stimulant this combination is without an equal. The assimilable iron acting as a blood tonic, and the nux vomica as a stimulant to the spinal cord. Its composition is as follows:

R Carb. protoxid iron gr. ijss
 Ext. nux vomic..... gr. $\frac{1}{2}$
 M. Ft. pil. No. 1.

Dose: Begin with one such pill every four hours, and increase to two pills three times a day, then three pills and finally four pills.

Nitric Acid in Malignant Pustule.—Dr. von Ruck reports (*N. C. Med. Jour.*), a case of malignant pustule upon the fore-finger of the left hand, which came under his notice before general infection had occurred. The pustule presented the characteristics as described in medical literature, the source of infection was, however, obscure. The patient had been handling cattle, and the day before its occurrence had cleaned out with his hands the mangers of his cattle barn. Microscopical examination of the discharging serum from the vesicle was negative, but upon consultation it was determined to destroy the vesicle and its base with fuming nitric acid, and to make culture experiments with the discharging serum. The culture in a moist brood oven, with a temperature of 100° F., succeeded, and the diagnosis was confirmed by the characteristic growth of the anthrax bacillus. The patient made a prompt recovery.

Care of Bowels.—In regard to the care of the bowels in the lying-in woman Dr. E. Curtis Hill says, (*Jour. Mat. Med.*), that it is needless to say that these emunctories ought to be kept freely open throughout the puerperal period. The best laxative for puerperæ is castor oil, to a dose of which five or ten drops of laudanum may be added to prevent griping; this medicine is classic, but not a favorite among either doctors or patients. A very pleasant and effective aperient is the compound liquorice powder, of which a tablespoonful every evening or two will have the desired effect. Chronic constipation either before or after confinement, a drachm dose morning

and evening of equal parts fluid extract cascara, glycerine and water, is excellent; this mixture together with drinking a glass of hot water an hour before breakfast and the formation of regular habits in going to stool, will seldom fail to restore the bowels to a natural and healthy condition. It is not well to scour the whole alimentary canal too frequently, and enemata are therefore of much use. A simple and effective clyster is one composed of an ounce each of glycerine and Epsom salts in three ounces of warm water. For a simple bilious attack calomel in one tenth grain doses with a grain of bicarbonate of sodium every hour or two, is a superior remedy. In case of jaundice the phosphate of sodium a teaspoonful three times a day, will usually effect a prompt cure. For slight hæmorrhoids, replacement, cold wet applications and the use of zinc oxide ointment generally suffice; aloes internally in one-fourth to one-half grain doses twice a day is also worth remembering.

Hydriatic Treatment.—The following is the technique of the method so successfully employed by Dr. Simon Baruch (*Diet. and Hyg. Gaz.*): After a thorough cleansing warm-bath or soap ablution, a day is allowed to elapse. The patient is now wrapped snugly, quite naked in a woolen blanket, so that his entire body is excluded from air; other blankets are piled over him; the windows are opened, and he is given a small glass of iced water every ten minutes. Having lain in this position an hour, now one part of the body is exposed and bathed as follows: A basin of water at 75° is ready, into which the attendant dips his right hand, covered by a mitten or glove of Turkish toweling. With the wet glove the face is well bathed. Now one arm is exposed and rapidly washed and rubbed, then dried and replaced under the blanket. Other parts are then successively treated. At the termination of this ablution the patient is rapidly rubbed all over with a coarse towel. This treatment is repeated daily, the temperature of the water being reduced two degrees on each occasion.

The next step is the dripping sheet. The patient standing in a tub of water at 100° F. has a sheet dipped in water at 70° thrown over his head and body from behind and is wrapped completely and snugly in it. The attendant now rapidly passes his outstretched hands over successive parts of the body, with some pressure upon the sheet. He rubs the *sheet*, not

with the sheet. One or more pitchers of water, five or ten degrees colder, are thrown upon the parts that have been subject to friction. The sheet is removed and the patient rapidly dried. This method requires great care and skillful application. Its success or failure depends upon ascertaining by previous treatment the reactive capacity of the patient. The most useful hydropathic procedure in phthisis, however, is the rain bath. Unfortunately, this finely-divided douche can only be administered in institutions.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

The Bacterium Coli Commune and the Bacterium Pyogenes.—Achard and Renault (*Sem. Méd.*), have found in the kidneys of a pregnant woman suffering from nephritis a bacillus exactly resembling the bacterium coli commune, but under conditions which seemed to exclude the hypothesis of penetration of this microbe into the organs after death. This fact led them to compare cultures of the *B. pyogenes* with others of the *B. coli commune*, with the result that the two micro-organisms seem to resemble each other absolutely in mode of growth and microscopic appearance. Neither could they find any difference in the pathological effects of the two microbes, which they are therefore disposed to regard as in every respect identical. These researches may help to explain certain extra-urinary lesions which have been attributed to the *B. pyogenes* of urinary fever; they may also explain the clinical analogy, long ago recognized, between infections of biliary and those of urinary origin.

Slow Pulse.—Among the causes of slow pulse Dr. D. W. Prentiss enumerates the following, saying that the causes which produce slow pulse may be classified as follows:

1°. Diseases or injuries to the nerve centers, producing either irritation of the pneumogastric or paralysis of the sympathetic (accelerator) nerves of the heart.

2°. Diseases or injury of the pneumogastric nerve, increasing its irritability.

3°. Disease or injury of the sympathetic nerves of heart, paralyzing them.

4°. Disease of cardiac ganglia, by which the influence of pneumogastric nerve preponderates.

5°. Disease of the heart-muscle (degeneration), whereby it fails to respond to the normal stimulus.

6°. The action of poisons, as lead or tobacco, either on nerve endings or centers. The poison generated in salt fish.

Also the poison of certain febrile diseases, algid pernicious fever.

Another possibility is *malarial poisoning*.

Bullet Wounds from the Mannlicher Rifle.—An Italian officer who had the opportunity of studying gun-shot wounds made with the Mannlicher rifle (*Boston Med. and Surg. Jour.*) during the late war in Chili describes these wounds as different from those produced by the older weapons. They either kill on the spot or produce a wound which is generally not very serious. Even at long range bones are pierced without leaving behind pieces of steel or lead, and also without producing splintering of the bone to any extent. The balls which were removed from wounds had entirely preserved their form, not being either flattened or broken. The author promises soon an extended report on the subject which will be of great interest to military surgeons. These peculiarities of modern rifle bullets have been noticed already by Professor Bardeleben in Berlin, who said that in case of war, wounds made by the present German infantry would be characterized by the straightness of the course of the bullet and the lack of injury to the neighboring soft parts. The bullet is of small calibre, made of lead coated with steel, and is sent with great velocity,

Asthma.—According to Dr. W. R. Arnick, (*Lancet-Clinic*), in asthma there is more or less congestion and irritation of the bronchial mucous membrane. This irritation acting on the vaso-motor system causes a contraction of the capillaries and is the first part of a paroxysm. If it does not extend any farther the paroxysm is slight. If the irritation is decided it produces a contraction of the circular muscular fibres of the bronchial tubes. This lessens the size of these air channels, and to that extent acts as an obstruction to the free passage of air both to and from the air cells. The larger the amount of irritation the greater the contraction, the greater the contraction the smaller the caliber of the bronchial tube, and the smaller the caliber of the tube (from the contraction) the greater the effort required to force the air through them, and

hence the harder the paroxysm. This condition of contraction, which produces the paroxysm, may pass off in a few minutes and it may last from one to several hours. A severe paroxysm may pass off in a half hour or in an hour, but it may be followed by some wheezing and shortness of breath which will last for a day or two. The paroxysms are the explosions caused by the irritation. After the paroxysm has passed off it is only a question of time until another one will come on.

Post-Mortem Examination of Auditory Organs.—P. C. Darsen-Utke, of Copenhagen, has examined post-mortem a series of auditory organs, (*Satellite*), and has come to two conclusions, which differ materially from the views of Helmholtz, laid down in his work, "Die Mechanik der Gehörknöchelchen und des Trommelfells": 1°. While Helmholtz describes the ligament anticum et posticum mallei (the latter also describes as the posterior fibres of the ligamentum externum mallei) as forming together a straight axis, which represents the "Achsenband" of the malleus, Darsen-Utke has found that the posterior fibres of the external ligament (Helmholtz's ligamentum posticum) invariably forms almost a right angle with the anterior ligament. 2°. According to Helmholtz, the incus does not exert any traction on the stapes when the manubrium mallei is moved outward. Larsen-Utke has, however, invariably found that by watching the base of the stapes from an opening in the vault of the labyrinth the base is distinctly seen to move round its longitudinal axis, when the caput mallei is pressed inward (the manubrium then moving outward), and by injecting a colored liquid in the canales semicirculares, and applying a fine glass tube in the superior canal, he has invariably found that compression of the air in the external meatus makes the liquid rise in the tube, while rarefaction makes it sink.

DISEASES OF WOMEN AND CHILDREN.

Opium Habit at Birth.—The following communication from Dr. J. M. Hays appears in the *North Carolina Medical Journal*:—Sylvia P., æt about forty, a respectable colored woman, gave birth to her first child September 18, 1886. Sylvia had for many years been a great sufferer from vaginismus and consumed large quantities of morphine daily. The

late Dr. P. W. Young had several years previously removed her coccyx, and the labor, though slow, was uneventful. The child was well developed and all promised to go well. On the next day the child died in a state of collapse preceded by hæmatemesis. I studied the case very carefully at the time, but the authorities to which I had access were all very vague in giving the etiology of hemorrhage from the stomach in newborn infants. I reached the independent conclusion that the cause of death in this case was the sudden withdrawal of the morphine which had become an essential element in the blood of the child during its intra-uterine life. I am now more than ever convinced that this was the proper solution of the problem. Under similar circumstances I would in the future not wait for serious symptoms to develop in the child, but immediately after birth institute a course of treatment for the opium habit, based upon the quantity of the drug used by the mother. If the mother's normal weight were 120 pounds and the quantity of morphine consumed by her in twenty-four hours eight grains, the proportion going to the child just before birth would be about one-half grain for the twenty-four hours. This I should give (making out the proportions in each individual case, of course) with a gradual diminution in quantity until danger is past.

Vulvar Gangrene.—The following treatment is recommended in *l'Union Médicale* for gangrene of the vulva in little girls:

℞ Acidi carbolic. ʒss
 Alcoholis ʒijss
 Aq. destillat. ʒl

M.

Sig.: Use as an injection or as a lotion.

After this has been used the parts are powdered with the following:

℞ Pulv. cinchonæ.
 Pulv. carbonis ligni ʒss

M.

Midwifery among the Alaskan Indians.—Dr. J. K. Simpson gives the following interesting account in the *Occidental Medical Times*: When a woman arrives in full term a tent or hut is erected at some distance from the Indian vil-

lage. A hole about two feet deep is dug in the ground inside the hut (or tent), and is lined with moss. A stake is driven into the ground a few inches from the hole. When labor begins the woman is made to sit over the hole in a squatting position as though she were in the act of defecation and using the hole as a privy vault. She grasps the stake with both hands. One squaw sits behind with arms clasped around the patient's abdomen, and another sits at each knee to act as a brace or support. They make no examinations, the midwife not being allowed to see the vulva of the patient under any circumstance. When a pain comes the patient holds on to the stake, the midwife clasps her arms more firmly about the abdomen, and the other two women press firmly against the knees of the patient with their shoulders. This is repeated with every pain until labor is concluded. When the child is born it drops into the hole, where it is left for five or ten minutes, or sometimes longer. Sometimes the child is seriously injured by the fall, and bones are occasionally broken. In case of fracture no treatment is followed, the bone being allowed to unite as it will. The umbilical cord is divided about four inches from the navel. They do not cut it, but taking hold with their fingers partly twist it and partly pinch it off with their nails. They do not tie it, as the torsion prevents hæmorrhage.

The third stage is managed same as the second, the women supporting the patient and assisting her as before. The placenta is generally burned or cremated and the ashes preserved until the child dies. The Indians here cremate their dead, the ashes being afterwards put in a receptacle, which, with some of the property of the deceased, is placed in a small burial-house. With those ashes the ashes of the placenta are placed; sometimes, however, the placenta is buried.

After the placenta is removed, the binder is applied. This consists of a number of pieces of bark about a foot long and two or three inches wide, placed parallel to each other and quilted between two pieces of cloth or skin, like the bones of a pair of corsets. This, when applied, resembles a very coarse set of stays. The binder is left on ten days, during which time the woman is never washed. The blood and discharge become encrusted about the vulva and

thighs, and, as it is moistened daily by the urine and lochia, her condition may be better imagined than described. Strange to say, I have never seen nor heard of a case of puerperal fever among them, although there have been about two hundred births in this neighborhood since I came here. During labor, and for ten days after, the woman is not allowed to eat or drink anything cold. Primiparæ remain in bed in the hut in which they were confined, for ten days, but many multiparæ get up and go about their work the first or second day.

To return to the child. It is first "fished" out of the hole and the cord divided. The midwife has a box or bladder containing a foul-smelling mass consisting of the leaves of some herb which has been chewed months before. A portion of this is applied to the stump and bound on. The child's face is then wiped, but no part of the body is washed. It is wrapped up and placed in a laced, bag-like arrangement (stiffened with bark in the same manner as the binder) which covers all of the child but the head. It is taken out of this to be cleaned three or four times daily. The child can be carried around like a sack of grain, but it is generally bound on the back of the mother. When the cord becomes detached it is covered by a piece of buckskin, which is nicely beaded. This is stitched to the breast of the child's clothing (like a rosette), and is worn by him until he is three or four years of age, when he is sent into the woods to hide it. There is a superstition connected with this which would take too long to detail.

SURGERY.

Mechanical Control of the Bowels.—In a paper on a new method of intestinal Surgery (*Am. Jour. Med. Sc.*), Dr. H. Widenham Maunsell, states: In performing exventrations or extensive laparotomy many contrivances are adopted to keep the bowels backward toward the spine and upward or downward, as the case may be. How is this to be done? Sponges only fill the abdomen and do not retain the omentum and intestines in the position most convenient for the operator. Assistants' hands occupy too much room and are often in the way.

I find the following device very simple and efficient:

Make three strong copper-wire frames, four, five, and six

inches square. These three sizes are quite sufficient for all cases of exventrations. A few minutes before operating cover them with three or four-ply of aseptic gauze, and sew it firmly to the framework. Fasten a strong eighteen-inch suture with a straight needle attached to each corner of the framework.

When one has performed an extensive laparotomy and found the bowel lesion, pass in a suitably sized frame covered with gauze and bend it, so as to keep the bowels in the required position. To retain it in this position pass the sutures from within outward on the outside of the quadratus lumborum and fasten them with a stiff rubber sliding clip, or, better still, to a wire retractor holding back the edges of the wound. In some cases it is only necessary to fix one suture on either side.

This method—with the sutures fastened to the wire retractors—

- 1.° Gives a fine view of the lesion to be operated on.
- 2.° Insures the bowels being kept warm and out of sight from the beginning of the operation until the end.
- 3.° Is extremely simple and efficacious.

Operative surgery being a purely mechanical science, it is best taught by a series of diagrams with explanatory notes.

The education of the surgeon is too much of the book—bookish. No man should pose as a surgeon unless he has had some mechanical training. As a boy, he should be taught to use a needle and thread, carving tools, and to draw, so that the hand may work in unison with the brain.

Compound Comminuted Fracture in the Ankle-Joint.
—At a meeting of the Johns Hopkins Hospital Medical Society. Dr. Halsted exhibited a number of cases (*Hosp. Bulletin*) among these being William Clark, æt. sixteen, who was admitted to the Hospital September 29, 1891. A day or two before admission, while attempting to board a freight train, he slipped and caught his left foot, he does not know how, in the gear of the car and sustained a compound fracture of both malleoli. On admission the boy was suffering greatly. His temperature was 39.4° C., his pulse 132. The left foot, ankle and legs were much swollen. There was an angry blush about the ankle which extended downwards to the toes and upwards to the middle of the leg. Over the inner malleolus was a transverse wound about six cm. long through

which projected the lower inner edge of the shaft (the upper fragment) of the broken tibia. Both malleoli were broken square off. There was some comminution of the inner malleolus and of the lower end of the tibia. The joint was suppurating.

Operation.—The ankle joint was fully exposed by the usual external lateral incision. Through this incision the cartilage was sawed off from the tibia, the astragalus excised and the cartilage chiseled away from upper surface of the os calcis. A longitudinal incision into the joint was then made from the inner side. Through this incision the fragments of the internal malleolus and of the tibia were extruded. A few additional longitudinal incisions were made through the tissues which were particularly tense. Then a slow but vigorous massage was practiced for some minutes to relieve the tissues of the great tension which existed. He was surprised at the rapidity with which the serum escaped through the cuts and at the amount of the transudate. In a few minutes the swelling of the foot, leg and ankle was dissipated. Had it not been for these long and numerous cuts he should have been obliged to remove the Esmarch bandage before practicing the massage. The propriety of exercising massage in such a case without the Esmarch bandage might be questioned. The Esmarch was removed temporarily to enable him to ligate the larger vessels. It was then replaced for the final disinfection of the wound: the leg was placed in a bath of corrosive sublimate (1-1000) for about three minutes. No stitches were taken. The wounds were covered with gutta percha tissue and the dressing applied before the Esmarch bandage was removed.

The patient's temperature declined rapidly to the normal point. He has not had an unfavorable symptom since the operation.

The wound is dressed to-night for the first time since the operation. You will observe that there is no redness nor swelling of the limb.

The blood-clots are more or less completely organized. The clot which fills the ankle joint is breaking down on the surface; but in a week or ten days the granulations will everywhere be even with the surface. This method of treating such cases is surely preferable to that which stuffs the

dead spaces with gauze or drainage tubes. He would emphasize the following points in the treatment of cases like this one:

1°. Excise cartilaginous surfaces and thus avoid having dead walls for dead spaces.

2°. Make free anti-tension incisions to relieve tension and to enable one to practice massage protected by the Esmarch bandage.

3°. Remove the Esmarch bandage temporarily to ligate the principal vessels.

4°. Use a few and as fine ligatures as possible. Avoid tight and unnecessary stitches.

5°. Disinfect the limb, protected by the Esmarch bandage, just before applying the dressing.

6°. Apply the dressing before the final removal of the Esmarch bandage.

Diseases of the Hip, Knee, and Ankle-Joint in Children.—Under the above caption there appears in the *Medical and Surgical Reporter*, an exceedingly and highly practical contribution on the subject of arthritic disease in growing children, from the pen of Dr. Thomas H. Manley, of New York.

The writer opens his brochure by denying emphatically the identity between scrofula and tuberculosis. He then goes on to say, that there is every phase of the tubercular malady in the stroma of the lymphatics and in the spongy heads of bone shafts; that the rule is, a spontaneous arrest of the malady, as age advances, in the vast majority of cases. It is also denied that infantile, osseous tuberculosis, is in any sense, a contagious malady; but, that on the contrary, it is rather the offspring of insufficient diet, or that of inferior quality; besides, overcrowding and imperfect ventilation. A warning, is given to note continuously, the clinical manifestations in all cases, in order that we may not confound struma, with syphilis, as many features of both are strikingly similar. The natural history of joint-maladies, is fully entered into, with all the varying phases of pathological changes occupying the intra-extra-articular, the osseous and arthritic tissues. Dr. Manley dwells at considerable length on the importance of making a rigorous examination, in all cases, which entail joint restraint in childhood; for, as he very pertinently adds, a joint may b

rendered practically useless, and yet preserve its structural elements unchanged, as is the case in muscular, tendinous, or ligamentous ankylosis. Hip-joint disease, so-called, he says, should be banished from medical nomenclature, as being a vague and often meaningless term, being too often employed, when the synovial and osteochondral structures or the ileo-femoral articulation, were in no way implicated by pathological process; while, on the contrary, were these maladies involving and adjacent to the hip-joint designated, muscular, neural, synovial-arthritis, osteo-arthritis, acute, subacute, chronic-traumatic or pathological; as syphilitic, rheumatic or strumous, a great gain would be made, which could be utilized, not only in the way of treatment, but prognosis as well.

The author says: that in this class it may be laid down as an axiom that the line of success in their management must always be in the direction of hygienic, constitutional and internal medication, rather than the purely mechanical measures, which, at best, serve but a subsidiary purpose, in the vast majority of cases.

He warns practitioners, not to apply any sort of permanent fixture apparatus to the hip-joint, unless he is assured that the head of the femur, or the floor of the cotyloid-cavity are involved, in the destructive changes. Mistakes, he adds, and careless, superficial examination at the articulation at the hip, he has often seen lead to such treatment as ultimately led to shortening, atrophy and ankylosis. This has been the case when one has mistaken a mere sprain, rheumatic or syphilitic inflammation for organic disease, and has instituted such measures of treatment as ultimately led to the ruin of the limb. Hence, while orthopedic apparatuses, serve a useful purpose, in clearly defined cases and under certain definite indications, their ignorant, careless or indiscriminate employment, is followed by most lamentable consequences.

The bed, he says, with the knee flexed on the body, for all hip maladies in their early stages. For, by instituting this simple procedure, the joint is given rest and all the powerful traction levers, of the femur are relaxed.

He unsparingly condemns the general practice of resection of the knee-joint for strumous disease in children; alleging that complete mechanical annihilation of an articulation is not its cure in any sense; that tubercular synovitis, osteo-

chondritis or osteitis at the knee, as a rule tends to spontaneous arrest, almost invariably in the growing child; with a more or less ankylosis; that there is no proof that there is danger of tubercle becoming disseminated through the body and lodging in organs, form a focus at the knee; for on the contrary, as a matter of fact, but comparatively a few, of those who have had tubercular synovitis at the knee ever develop pulmonary or meningeal tuberculosis. Resection causes an arrest of growth of the whole limb and as the distinguished joint surgeon, Dr. Gibney, of New York, has demonstrated at the Academy of Medicine, as the child rises in height, this arrest of development must be compensated for, on the resected side, by a lift or a sort of stilt from four to six inches high, to allow for the disproportion. Further, that not infrequently, the sawn surfaces of bone fail to solidly unite and the strumous or tuberculous changes continue, above or below the joint excision, in the epiphyseal ends of the bones. Even though there were no diminution of growth in the bones, yet he maintains, that the limb ankylosed in the straight position is for a thousand purposes an inferior attitude to one flexed from twenty to forty degrees, which possesses all its ligamentous supports.

But little is said of tuberculosis at the ankle-joint. In concluding the doctor adds an interesting chapter, on the subject of joint neuroses; those painful sensitive joints, of nervous, hysterical, young women; in whom the articulation is ankylosed, yet, on the most critical examination, no organic changes can be discovered to account for it. With these, he maintains the origin, is in the cortical areas of the brain, and that the physical impediment lies in the muscle sheaths in the thecæ of the tendons, or the inter-muscular spaces. They belong to that group of joint affections, in which, the traveling charlatan makes his marvelous cures, when eminent surgeons fail; and must be dealt with, by a combination of powerful, mental impressions, with active, direct intervention of the surgeon. The stiffening, he says, must be limbered out by sudden, violent force, applied, in an unexpected abrupt manner, without the aid of any anesthetics. For, he insists, that the infliction of pain is a *sine-qua-non*. Directions are given as to how this force is to be applied in those pseudo-ankyloses, so that fracture of the bone may be avoided, or serious laceration of the tendons or ligaments occasioned.

Book Reviews.

Nursing in Abdominal Surgery and Diseases of Women.

By ANNA M. FULLERTON, M. D. 12 mo. pp. 284. Illustrated. [Philadelphia: P. Blakiston, Son & Co., 1891.

A work of this kind has been long needed on account of the operative craze which seems to have seized surgeons. Now that abdominal surgery is a fad, it is but right and meet that one of its most valuable adjuncts should receive that care and attention which it deserves and without which many a promising operation has terminated in dismal failure. A good nurse, well-trained is indeed a jewel and a good guide written in a systematic manner is of inestimable value in the formation of the trained nurse.

Hitherto, all the literature on nursing in abdominal surgery and diseases of women has been of a rather scattered and desultory nature, the present being the first comprehensive manual on the subject which has appeared. It is not only a practical hand-book, but one replete with valuable hints. We find directions for the preparation of the patient and room for an operation, the articles requisite, etc. Methods of sterilizing as well as for antiseptic procedures are given and, in fact, all the information which a surgeon might desire to give. This is a valuable feature of the book as it saves much valuable time which heretofore has been devoted to an explanation of what was needed.

We have no doubt that this will be adopted as a text-book in training schools for nurses as it certainly deserves to be, and the trained nurse will find it a most valuable adjunct in increasing her efficiency and usefulness.

Surgical Anatomy. For Students. By A. MARMADUKE SHEILD, M. B. (Cantab), F. R. C. S. 12 mo. pp. 226. [New York: D. Appleton & Company, 1891.

The author of this book has written it as an aid to students who desire to pass examinations in surgical anatomy. It is not presented with a desire to supplant the larger and more compendious works on the subject, but as a remembrancer of

the more important points of anatomy which are of surgical interest. It is a book which can only be studied, not read. Its usefulness can be made apparent only in connection with a cadaver or living subject and here it is that its real value will immediately become apparent.

We can confidently state that any one who can master its contents in connection with a cadaver will possess the material which goes towards the making of a surgeon. He will acquire a knowledge of the practical applications of anatomy, in connection with surgery, which go so far to make the neat, thorough, and expert operator.

The author has had much experience as demonstrator of operative surgery at Charing Cross Hospital and the practical necessities of students have thus become known to him and added to his efficiency as a writer on the subject. The landmarks on the surface and such as can be determined by palpation and other methods of physical investigation are given, as well as the other surgico-anatomical details. Written in an interesting manner, this book cannot fail to make friends even of those who, while not desiring to become surgeons, take an interest in the subject.

Physical Diagnosis. A Guide to Methods of Clinical Investigation. By G. A. GIBSON, M. D., D. Sc., F. R. C. P. Ed., and WILLIAM RUSSELL, M. D., F. R. C. P. Ed. 8 vo. pp. 376. With one hundred illustrations. [New York: D. Appleton & Co., 1892.]

This little work is one whose careful study will lead its reader to that most desirable quality in a practitioner of medicine—rational and systematic examination of a patient. The authors have learned what the requirements of students are as well as those methods which are not only the most useful but the most systematic and thorough. After spending years in teaching physical diagnosis, they have been able to arrive at a comprehensive understanding of the needs in this direction and they have succeeded in producing a clear and comprehensive manual on the subject.

The value of different signs and symptoms is given as well as the methods of determining the more obscure ones which are frequently of the highest importance in the determination of apparently inexplicable cases. All the organs are

considered in their relations to physical diagnosis and the liberal use of illustrations renders the work more useful as well as more valuable. It is one which cannot but prove of the greatest help to the instructor of physical diagnosis as an assistant in his work.

It is true that it is not as comprehensive as it might be. But this far from detracts from its value. In fact, it is an advantage by not leading to a confusion of ideas and overburdening the mind. The salient facts, such as will always prove of value, are given and the work of dilating upon minute points is left to the teacher.

We can heartily commend the work to teachers and students alike as one which will prove a useful vade-mecum and a friend in the hour of need upon many an occasion.

Literary Notes.

The *Annals of Surgery* are no longer published in St. Louis. The transfer of this valuable publication to Philadelphia was effected some short time ago. The University of Pennsylvania Press now issues the *Annals*, the editors remaining the same.

The *National Medical Review* is the latest accretion to periodical medical literature. It is a monthly of 16 pages, 8vo. size published and edited by Dr. Charles H. Stowell, of Washington, D. C. The subscription price is one dollar per year. It is well printed and contains short pithy abstracts.

Merck's Bulletin of New Discoveries in Materia Medica and Practical Therapeutics has appeared in a new and enlarged form. It constitutes a handsome monthly and contains much of the most useful information to be gathered in the fields of therapeutics and materia medica. It is one of our most valued exchanges and considering its value and the amount of matter given its subscription price, two dollars, is exceedingly low.

The *Hospitals of New York* is a handsome and unique advertisement issued by the New York Pharmacal Association, of Yonkers, N. Y. The "Views" consist of six well

executed plates giving a number of pictures of the Bellevue, New York, and Roosevelt Hospitals two cards being devoted to each. On the reverse side of the cards are given items of information concerning the respective hospitals, as well as the staff of physicians attached to each one. Any physician sending to the firm will receive a copy of the pictures by return of mail.

Bulletin of the Harvard Medical School Association, is a handsome, large octavo, the first number of which has reached us. This deals with the transactions of the First Annual Meeting of the Association which occurred in Boston, June 23, 1891. We are presented with a list of officers, the constitution, a report of the business meeting, and an account of the first annual dinner of the Association. The objects of this society are to promote the cause of advancing medical education and to do all in its power to advance the interests of the Harvard Medical School.

Literary Robbery.—By a recent decision of a French tribunal a medical journal is not permitted to make an extract from another without giving due credit. In a case which has been adjudged the guilty party was condemned to pay quite a large sum for every article "cribbed," and, in addition, was subjected to the further mortification of being forced to publish the findings of the court. The judgment in this particular case was a rather severe one, but it was certainly deserved as the piratical journal refused to give proper credit after having been requested several times to do so.

Diseases of the Bladder and Prostate is the subject matter of a recent number of the *Physicians' Leisure Library*, published by Geo. S. Davis of Detroit. The author of this brochure, Dr. Hal C. Wyman, has given us a valuable condensation of the facts connected with these subjects. Although the entire subject is necessarily abridged, so far as discussing minor points is concerned, sufficient is given to create a clear conception of the various points involved in the treatment of the diseases of the prostate and of the bladder in the male. It is on the whole a useful addition to our literature on genito-urinary surgery. Those desiring to obtain a copy may do so by addressing the publisher and inclosing the amount of its price—25 cents.

Transactions of the Detroit Medical and Library Association form a well-printed octavo of two hundred and three pages. These constitute the transactions of the society for the year 1891 and are reprinted from the *Physician and Surgeon*. The variety of subjects and the quality of the papers in general are all of such a character as to reflect much credit upon this association. One notable feature that is observable is the fact that the discussions on papers are cut down as much as possible and only those parts which are absolutely essential are inserted. By this process of judicious elimination the reader is spared the torture of wading through pages of absolutely profitless matter, and the value of the proceedings correspondingly enhanced.

Delsartean Physical Culture is the title of a duodecimo of 108 pages written by Carrica Le Favre, and published by Fowler & Wells Co., of New York. The method of Delsarte has excited so much interest, and has met with such success as to lead to its widespread adoption, that a comprehensive description of it by one well fitted to the task will be hailed with pleasure by many who do not understand it thoroughly. Those who are curious or who desire to obtain more light upon this subject will learn from this little book how the physical development of the body can be carried out, so as to give expression to every movement and how emotions may be developed by the different methods of breathing, etc. The price in paper is 25 cents, and in extra cloth 75 cents.

Essentials of Medical Electricity is the title of No. 23 of the Quiz Compendis issued by W. B. Saunders, of Philadelphia. The authors of this instructive little work of 158 pages are Drs. D. D. Stewart and E. S. Lawrance, who have done their work in a very thorough manner and have demonstrated how a difficult subject can be so handled as to become easily understood. Beginning with general considerations upon electricity, the particular forms, and methods of generating them are then taken up and thoroughly examined. After this, and concluding the work, are given the special therapeutic indications and applications. The authors have wisely chosen as guides the best authorities on the subject, so that a distinctive feature of their book is reliability. It may be regarded as a trustworthy guide and, under these circumstances, should

certainly meet with a good sale, more especially when we consider the low price asked for it—\$1.00.

Diagnosis and Treatment of Hæmorrhoids and other non-malignant rectal diseases forms the subject matter of a booklet of 148 pages by Dr. W. P. Agnew. The publisher is R. R. Patterson, of San Francisco, Cal., who places the imprint of the second edition upon the copy before us. Hæmorrhoids occupy the largest share of attention, fistula, fissure, polypi, stricture, ulcers, and the irrepressible "rectal pockets," also claiming a share of attention. Pruritus ani is discussed in a very summary way and the author seems to avoid it by stating the treatments found best by others. Taken all in all we have been somewhat disappointed in this little work as we expected to find more that would be of practical value to the reader. The index is a very meagre one and not calculated to be of much value in seeking references to particular subjects.

Stricture of the Rectum is the subject of a handsome monograph of forty-eight pages by Dr. Chas. B. Kelsey. The present is the second edition which has been enlarged. The author has had considerable experience as a rectal surgeon and his opinions command attention. His conclusion in regard to syphilitic stricture of the rectum is that it is far from being as common as is generally stated. In fact, venereal stricture, in general, is not such an ordinary affair as some surgeons would lead us to suppose. He contends that cicatricial contractions due to other causes have frequently remained unrecognized, so far as their etiology was concerned, and were carelessly relegated to a syphilitic origin. The entire essay is one well deserving careful reading and study, more especially as one hundred and thirty-eight cases are tabulated with critical remarks.

Sleep, Insomnia, and Hypnotics by Dr. E. P. Hurd is one of the late numbers of the Physician's Leisure Library, published by Geo. S. Davis, of Detroit. The original intention was to translate the essay of Germain Sée on insomnia and hypnotics, but the translator became so interested in his subject that he added to it, revised it and finally produced an original monograph which is before us in the form of an inter-

esting and practical consideration of the subjects with which it deals. Insomnia is one of the most stubborn conditions the physician is called upon to relieve and one which occasionally will not yield to the best therapeutics. In the little book before us, Dr. Hurd goes into a pretty full consideration of the physiology of sleep, the etiology and pathology of insomnia as well as the philosophy of its treatment together with a herapeutic analysis of the various hypnotics most ordinarily used. The book is well worth reading. It is published uniformly with other numbers of the series at the price of twenty-five cents.

Books Received.—The following books have been received and will be reviewed in due course of time :

Nursing in Abdominal Surgery and Diseases of Women. By Anna M. Fullerton, M. D., 12mo. pp. 284. Illustrated. [Philadelphia: P. Blakiston, Son & Co., 1891.

Fifth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Transmitted to the Governor, December 2, 1889, 8vo. pp. 734. [Harrisburg: Edwin K. Meyers, State Printer, 1891.

Sixth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Transmitted to the Governor, December 1, 1891, 8vo. pp. 740. [Harrisburg: Edwin K. Meyers, State Printer, 1892.

Practical Midwifery. A Hand-Book of Treatment. By Edward Reynolds, M. D., 8vo. pp. 424. With 121 Illustrations. [New York: William Wood & Co., 1892. Price \$2.50.

Pamphlets Received.—The following have been received since our last issue, and we take this opportunity of returning our thanks therefor to the authors :

What Can be Done in Cerebral Surgery? Remarks Based Chiefly upon Personal Experience in Twenty-Three Cases, by Emory Lanphear, M. D. Ph. D. (From *American Jour. of Surg. and Gyn.*, January 1892); Mouth-Breathing not the Cause of Contracted Jaws and High Vaults, by Eugene S. Talbot, M. D., D. D. S. (Reprinted from *Dental Cosmos*, Nov. 1891; Valedictory Address, by D. W. Montgomery, M. D. (Reprinted from *Pacific Medical Journal*, Dec. 1891); Report of a Case of Spina Bifida, by H. Augustus Wilson, M. D. (Re-

printed from *Trans. Am. Orthop. Ass.*, Sept. 1891.); Femoral and Ventral Hernia in Woman—The Kangaroo Suture, by Henry O. Marcy, A. M., M. D., L. L. D. (Reprinted from *Trans. Am. Ass. Obst. and Gyn.*, Sept. 1891.); Scope of Orthopedics—The Forms of Club-Foot—Tenotomy, etc., by H. Augustus Wilson, M. D., (Reprinted from *Med. and Surg. Reporter*, Dec. 5th and 12th, 1891.); The Aseptic Closure of Long Standing Sinuses, Having their Origin in Tubercular Joints, by H. Augustus Wilson, M. D., (Read before Phila. Acad. of Surg., Nov. 2d, 1891.); Considerations upon Medical Hæmorrhage Surgically Treated, with a Successful Case, by a New Technique, of Saline Infusion for Severe Hæmorrhage, by Robert H. M. Dawbarn, M. D.; Water as a Local Anæsthetic. Its Discovery American and not German, by Robt. H. M. Dawbarn, M. D. (Reprint from *Med. Rec.*, Nov. 14, '91); Some Observations of Rectal Surgery in Europe, by Leon Strauss, M. D., (Reprint from *Med. Mirror*, Jan., 1892.); A Case of Multiple Dermoid Cysts Simulating Xanthoma Tuberosum, by S. Pollitzer, A. M., M. D. (Reprint from *Jour. of, Cut. and Genito-Urin Dis.*); Excision of the Syphilitic Chancre by S. Pollitzer, A. M., M. D. (Reprint from *Med. Rec.*, Oct. 24, 1892); Hydradenitis Destruens Suppuration. By S. Pollitzer, A. M., M. D. (Reprinted from *Jour. of Cut. and Genito-Urin Dis.*, Jan. 1892.); Notes on General versus Local Treatment of Catarrhal Inflammations of the Upper Air Tract. By Beverly Robinson, M. D. (Reprinted from the *Chinatologist*, Dec. 1891.); Annual Address before the State Board of Health of Pennsylvania, by Prof. Samuel G. Dixon, M. D., (Read May 15th, 1891.); Report of Committee on Disposal of Waste and Garbage, to the American Public Health Association, Oct 20th, 1891. (Reprinted from Vol. XVII., *Trans. Am. Pub. Health Ass.*)

The Cause of Baldness, says a recent German writer (*Med. Rec.*), is too much barbering. In support of this theory he instances long-haired artists who never trouble the barber and have a plentiful stock of hair, but he forgets that such people are usually killed off by an outraged populace before they get old enough to be bald.

Society Proceedings.

CLINICAL SOCIETY OF MARYLAND

BALTIMORE, Feb. 5, 1892.

The 261st Regular Meeting of the Society was called to order by the President, Dr. Robert W. Johnson.

Dr. W. B. Platt, read a paper on "Free Dispensaries or, the Physician and the Poor."—Dr. Platt in his dispensary work adopts as nearly as possible the following plan: Inhabitants of certain squalid alleys well known to him are treated without question. The destitute and forlorn, whose aspect is unmistakable to one having dealings with the poor, come in first of all for treatment. Mechanics, artisans or laborers, out of work and out of money, and the poor families of drunken and worthless men are all entitled to free treatment. Adults who have to pay for their board and lodging out of wages less than \$5 per week are treated free. House servants earning \$10 and \$12 per month can and do pay physicians for advice.

Dr. I. Atkinson said: This subject, as Dr. Platt has pointed out, bears upon the patients, the physicians in attendance and the profession at large. The abuses of dispensaries is a world-wide complaint and the difficulties that stand in the way of correcting them are almost insuperable. In the first place, the presence of a person at the dispensary is a confession of poverty and when questioned in regard to their financial condition, nearly every patient is prepared to say that he is unable to pay the fees of a physician. Occasionally one encounters patients who, when questioned, avow their ability to pay and are properly excluded. I think that the evils of dispensary service are more apt to be developed in dispensaries other than those in which patients are used for clinical purposes. The presentation before a class of students is to persons who are not degraded, a very disagreeable procedure and they will refuse to come again unless compelled by necessity.

What kind of patients are entitled to relief? Every one admits that the pauper is a proper person. There is not so

much unanimity of opinion with regard to the relief of those persons who are brought to that condition by their own vices. Never mind what his faults, nor what his vices, nor how utterly beyond the pale of ordinary sympathy he is, as soon as he is sick he becomes a worthy object of charity. In this way medical charity differs from almost every other charity. Dr. Platt mentions another class that especially appeals to my sympathy, viz., the wage-earner who makes \$10 per month. As to whether or not he shall pay, depends entirely upon how much he is called upon to pay. A fee of \$1 would be 10 per cent of his income for the month and his medicine would cost perhaps 5 per cent more. It may be that he should not be the beneficiary of a free dispensary but of a provident dispensary, the absence of which in Baltimore, I very much regret. I further believe that the man who earns \$1 or \$1.50 per day, and supports his family is entitled to a modified relief. This man, by careful economy, is able to keep his family alive, but he cannot support them in comfort. Just as soon as a member of his family falls sick his expenditures are enormously increased while his income remains the same or is diminished. If he himself falls sick the income stops while expenses increase. I think that one of the great needs is that modified form of charity which we recognize as a provident dispensary. This idea of a provident dispensary is not a new one. The individual pays into it so much per month and his membership entitles him to receive the services of good, intelligent physicians, who are properly paid for their services by the association, and gets his medicines at a reduced rate. Membership in the dispensary is only granted to those who receive a certain maximum of wages. Such dispensaries have been in existence in England for fifty years, yet the number is small. The justice of them, the propriety of them and the benefits to be derived from them are so manifest that it is difficult to understand why it is that such a limited popularity should be accorded to them.

That there is dreadful abuse in dispensary practice, I am convinced, but that the abuse is not altogether on the part of the patients, I am also convinced. There are few ordinary day laborers who feel able to pay the full fees of physicians and the prices of the pharmacist. Some do it from pride, some from principle and some they know not why. But in

case of continued sickness it is absolutely impossible for them to pay physicians fees and they are forced into incurring debts which they know they cannot pay. I am an advocate of that form of relief which shall not pauperize the individual but will enable him to secure for himself and family proper professional advice and necessary medicines without too great a strain on his purse.

Dr. Platt: I think Dr. Atkinson's point in regard to there being less abuse in dispensaries where patients are used for clinical material, is well taken; and yet the great howl that has gone up recently has been on account of a dispensary which is used almost exclusively for purposes of instruction. I think there are many persons who are perfectly shameless about getting charity. There is generally a look about a person who lives poorly and miserably that enables you to spot them as quickly as you can tell a wharf rat from a common one. They have poverty written all over them. There is a middle class, whose earnings are not much, yet who have deposits in savings bank and ought to pay. There are physicians who would make a reasonable number of visits at half-price and they can get reduced rates at the pharmacists. As to having patients pay at a dispensary, that has been tried. The only thing that has not been tried thoroughly is to carefully investigate each patient by a visit to his home. I have had people come to me at the dispensary who owned houses and had bank accounts, others with a large number of children all receiving good salaries.

I think the key to the whole matter is to look up each individual and see whether or not he can pay. I think there are very few physicians in this room who charge all persons alike. If a patient cannot pay my full fee I treat him for less.

Dr. Herbert Harlan: I have had experience with different dispensaries ever since my student days. I believe that at the dispensary of the Maryland University, where patients are used for clinic purposes, there is very little imposition. It may be on account of the large class of students, for the tendency of people is not to go before a class of students. I have known a good many patients to go to that dispensary on other days of the week and to absent themselves on the days of the clinic. There is, however, quite a large class of people who like to have their cases discussed. The Baltimore Gen-

eral Dispensary is not imposed on much because the physicians visit the patients' houses and see whether they can pay or not. The great abuse is undoubtedly in the special dispensaries. We have tried a good many devices to prevent those who ought to pay from receiving services free. One was for physicians to question them as to their ability to pay. Sometimes they answer yes, sometimes no. Some say they can pay but others who can pay are treated free. Here is the point that I want especially to raise here. At a special dispensary it is a daily occurrence for patients to say, doctor, so and so, my family physician sent me here to have my case treated. Physicians themselves are not as particular about these things as they might be. We ask such people if they pay their family physicians and they reply, certainly we do. Then we refuse to treat them. We have tried another way to prevent abuse, viz, by having a clergyman, who is regularly employed for the purpose, to go about the waiting room and question the patients and act as judge as to who shall or shall not be treated. This, I think, is a move in the right direction. We are indebted to Dr. Platt for calling our attention to this matter and we ought all to make an effort to do away with the abuses.

Dr. I. E. Atkinson: The physician who charges but small fees knows that in many cases his patient cannot pay the fees of a special practitioner. I frequently have had patients who pay me, go to a special dispensary. They do not ask my opinion about it. They say they cannot pay specialists' fees. I think the standard in regard to this class of patients should be a little different from that of the class going to the general dispensaries.

Dr. J. Edwin Michael, read a "Report of Eight Additional Cases of External Perineal Urethrotomy Without a Guide," these cases being in addition to nine cases already reported by him in the spring of 1887.

Dr. Platt thought that considering the difficult nature of the operation the success of Dr. Michael was astonishing and very unusual.

Dr. Robert W. Johnson spoke on "A Convenient and Comprehensive Method of Instrument Disinfection," and exhibited the apparatus which he devised and uses. Dr. Johnson boils everything except himself, the patient and the

rubber tissue. He boils ligatures, needles, gauze, etc., and also the trays which hold them. The boiler is a plain tin one, large enough to accommodate the trays, with spigot attached near the bottom. A nest of elongated trays of granite-ware is found most convenient. Before leaving his office he goes over the instruments that will be required and puts them in a tray. The dressings to be used are put in another tray; and so on, and finally the trays are built up one upon another and all are put into the boiler which is put in the back of the wagon. At the patients home the boiler is filled up with boiling water, put upon the stove and boiled for twenty to thirty minutes, while the patient is being prepared for operation. When ready for operation, the trays are lifted out by means of sterilized button-hooks. The boiler is put in an elevated position, a rubber tube attached to the spigot, and the boiled water is used for irrigation. It makes no difference whether knives or dressings touch the sides of the tray for they are quite aseptic.

Dr. Herbert Harlan asked what means were taken to prevent the rusting of instruments in boiling. He had noticed the curious phenomenon that the steel blades of a set of knives with aluminium handles rusted more readily than those of knives with ivory handles.

Dr. Chunn asked Dr. Johnson's method of preparing his hands for operation.

Dr. Johnson: By adding a slight amount of bicarbonate of soda to the water rusting of instruments during boiling is prevented. I sometimes use bichloride on my hands, and sometimes potassium permanganate cleaning it off with oxalic acid. The latter is probably the best method.

The Sixth Meeting of the French Congress of Surgery will be held in the buildings of the Faculty of Medicine in Paris on April 18 and following days, under the presidency of Professor Demons, of Bordeaux. The following are the special subjects proposed for discussion: 1°. Pathogeny and Treatment of Surgical Gangrenes. 2°. Pathogeny of Infective Accidents in Sufferers from Urinary Troubles. 3°. Surgical Operations on the Biliary Passages—their Results, Immediate and Remote.

Melange.

The Next Annual Session of the North Carolina Board of Medical Examiners will be held in Wilmington, beginning on Monday, May 22, and remaining in session until all candidates are examined. The examinations are written and oral, and at this session, as we understand, a number of applicants, chosen by lot, will be required to make clinical diagnosis of cases presented to them.

Curious Wounds.—One of our western cotemporaries remarks: Sometime ago, according to the daily papers, a Pennsylvania man was shot in the oil regions. The wound was severe but not mortal. Later news reports show that there is an even more vulnerable part of the human frame than the oil regions. Last week a Nebraska woman received a wound in the early morning which proved fatal in a short time.

The Serosine Chemical Co., of St. Louis, was incorporated February 29, last, under the laws of Missouri. Its capital stock is fixed at \$4000. This is a concern which is making steady progress and forging to the front. It is an assured success and we are pleased to see the energy and integrity of this company rewarded in such a substantial manner; for there is certainly nothing more satisfactory than business success earned in a legitimate way.

Association of American Physicians.—The annual meeting of the Association of American Physicians will be held May 24, 25, and 26, 1892, in the Medical Museum and Library, Washington, D. C.

The subject selected for discussion is "Dysentery." Dr. William T. Councilman, as referee, will consider the etiology and pathology, and Dr. A. Brayton Ball, as co-referee, the symptomatology, complications, and treatment.

Dermatological Prizes.—The prize which was offered in 1891 by Dr. Unna, of Hamburg, for the best essay on the Topography of the Elastic Tissue in the Skin of Adults, has been awarded to Dr. Zenthofer, of Stallupoenen. The subject

of the prize (\$75) for 1892, which is open to all competitors without restriction, is the Wasting and Regeneration of the Elastic Tissue of the Skin under Different Pathological Conditions. The judges are Professors Klebs and Hoyer. Essays must be sent in by the beginning of December, 1892, to Leopold Voss, publisher, Hohe Bleichen 18, Hamburg, from whom any further information that is required may be obtained.

The Committee appointed at the last meeting of the American Medical Association to consider the best means for promoting the prosperity of the sections of the Association will hold an adjourned meeting in the Hotel Cadillac, Detroit, Mich., June 6, at 3 P. M.

Members of the Committee are requested to notify the Chairman of their intention to be present at this meeting.

The Committee would esteem it a favor if each member of the Association would communicate in writing his or her views concerning the best measures for promoting the development of the sections. Such communications may be sent to the Chairman of the Committee.

JOHN S. MARSHALL, M. D., Chairman.

9 Jackson St., Chicago.

Plagiarism Extraordinary.—Under this head the *Medical News* presents its compliments to *The Western Medical Reporter*, and to a contributor to its issue of February, 1892—one Charles C. Kohning, M. D., of Brussels, Ill. The editors of *The Reporter* are evidently not such good readers of the *News* as their contributor. The latter writes an article presumably original, but which is copied verbatim from the article of Professor Goodell in the *Medical News* of November 29, 1890. Dr. Goodell's paper was entitled, What I Have Learned to Unlearn in Gynecology. Dr. Kohning omits the word have in his title. There is one original sentence in Dr. Kohning's article, and that, as so often occurs, proves that the gentleman has also other educational and original qualities: "As proof of this see American Indian and several other nations." A funny typographical blunder completes the evidences of originality. Dr. Goodell spoke of a medieval superstition—the belief in two seeds, the male and female semen, etc. To the medieval ignorance is added the modern, and we have "the existence of hoo-seeds"—with an apt exclamation point!

The Belgian Society of Gynæcology and Obstetrics, under the patronage of the Belgian Government, has taken the initiative in organizing "The International Periodical Congress of Gynæcology and Obstetrics," the first session of which will be held in Brussels, September 14 to 19 inclusive, 1892. Three leading questions will be offered for discussion:

1. Pelvic Suppuration; Referee, Dr. Paul Segond, Paris.
2. Extra Uterine Pregnancy; Referee, Dr. A. Martin, Berlin.

3. Placenta Prævia; Referee, Dr. Berry Hart, Edinburg.

Fees: Members participating in first session, 20 Francs. (This will entitle the holder to a copy of the proceedings of the Congress)

Founders (Life Membership), 300 Francs.

In connection with the Congress there will be an International Exposition of instruments and appliances, pertaining to Gynæcology and Obstetrics.

All communications pertaining to this Congress should be mailed direct to the American Secretary Dr. F. Henrotin, 353 La Salle Ave., Chicago, who will promptly furnish all information.

Russian Universities.—The total number of students in the University of Warsaw (*Brit. Med. Jour.*), during the current semester is 1,189, of whom 621 belong to the medical faculty. In the University of Dorpat the total number of students on September 1, 1891, was 1,723, of whom 863 were students of medicine. Between February 1 and September 1 the number of diplomas granted by the Medical Faculty of the University was 218. The degree of Doctor of Medicine was conferred on forty-six candidates; the simple *venia practican*di was granted to thirty-nine; the title of "District Medical Officer" to fourteen; the degree of Master of Pharmacy on five; licenses to dispense to thirty-two; licenses as druggists' assistants to forty-nine; licenses to practise dentistry on fifteen; licenses to practice as midwives were also granted to thirteen women. The number of students in the University of Kasan during the academic year 1890-91 was 757, of whom 402 belonged to the medical faculty. The degree of Doctor of Medicine was conferred on five candidates. In the Military Medical Academy of St. Petersburg the license to practice was granted in 1891 to 100 candidates, of whom thirty-eight passed "*cum laude*." Kieff licensed seventy-two candidates.

Medical Schools in Turkey.—We learn from the *Medical Age* that there are five medical schools in the Turkish empire—one at Constantinople, one at Cairo, one at Aintab in Northern Syria, and two at Beyrout, one of the last named being Protestant and the other Roman Catholic. Only the Constantinople and Cairo institutions possess the right of granting a license to practice; the other three, which are in the hands of missionaries, can only give certificates of study, candidates having to go to Constantinople to be examined. A diploma conferred by the Cairo school gives only the right to practice in Egypt; if a doctor who has obtained a diploma at Cairo wishes to practice in other parts of the Turkish empire he must pass a further examination at Constantinople. The medical school of Constantinople was founded in 1883, and up to the present time has educated some 1,400 practitioners. The teaching staff comprises twenty professors, and the curriculum is of six years. The Cairo school was founded in 1827 by Dr. Clot Bey. The Protestant medical school of Beyrout has been in existence about twenty-two years, during which time it has educated 105 practitioners. There are six professors, and the length of the curriculum is four years. The other two schools are organized on a similar basis.

New Buildings for Jefferson Medical College of Philadelphia.—The Board of Trustees and the Faculty of the Jefferson Medical College have just completed the purchase of two large lots on Broad street, giving them a frontage of about 300 ft. and a depth of 150 ft., upon which they will proceed to erect at once a handsome hospital, lecture hall and laboratory building. The estimated cost of the buildings is \$500,000. The hospital will be built not only as a suitable building in which to care for the sick and injured, but also will be provided with a large amphitheatre for clinical lectures. The basement of the hospital building will be given over to the various dispensaries, each of which will be provided with large waiting and physicians rooms as well as rooms for direct teaching of the students. All the buildings will be absolutely fire proof and provided with patent sprinklers in case their contents catch fire. By the erection of three commodious buildings, the laboratories where delicate work with the microscope or apparatus is carried on, will be separ-

ated from the college hall where didactic lectures are given and so will be free from any jarring produced by the movements of large classes. With the hospital on one side affording clinical facilities and the laboratory on the other side of the college hall for scientific research and training the college will be most favorably situated for giving thorough instruction in medicine. Further than this immediately across the street is the Howard Hospital and on the adjoining corner the Ridgway branch of the Philadelphia Free Library, which contains all the scientific works belonging to this wealthy corporation. The new site is even more favorably situated in regard to the centre of the city than the old one at Tenth and Sansom streets. The move has been rendered necessary by the large number of students who are now being instructed in this institution and because the Faculty desire to keep the school and hospital in the foremost rank of medical education in this country.

The buildings will be ready for occupancy in the session of 1893 and 1894.

U. S. Marine-Hospital Service.—A board of officers will be convened in Washington, May 2, 1892, for the purpose of examining applicants for admission to the grade of Assistant Surgeon in the U. S. Marine-Hospital Service.

Candidates must be between twenty-one and thirty years of age, graduates of a respectable medical college, and must furnish testimonials from responsible persons as to character.

The following is the usual order of the examination: 1, physical; 2, written; 3, oral; 4, clinical.

In addition to the physical examination candidates are required to certify that they believe themselves free from any ailment which would disqualify for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography by the candidate. The remainder of the written exercises consists in examination on the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and the natural sciences.

The clinical examination is conducted at a hospital, and when practicable candidates are required to perform surgical operations on the cadaver.

Successful candidates will be numbered according to their

attainments on examination, and will be commissioned in the same order, as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large marine-hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service Assistant Surgeons are entitled to examination for promotion to the grade of Passed-Assistant Surgeon.

Promotion to the grade of Surgeon is made according to seniority and, after due examination, as vacancies occur in that grade. Assistant Surgeons receive \$1,600, Passed-Assistant Surgeons \$1,800, and Surgeons \$2,500, a year. When quarters are not provided, commutation at the rate of \$30, \$40, or \$50 a month, according to grade, is allowed.

All grades above that of Assistant Surgeon receive longevity pay, 10 per centum in addition to the regular salary for every five years service, up to 40 per centum after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information or for invitation to appear before the Board of Examiners, address

(Signed)

WALTER WYMAN,
Supervising Surgeon General, M.H.S.

The Practice of Bleeding had just as strong foes in the seventeenth century as in the nineteenth (*Med. Rec.*). The people did not want to be bled; they preferred to take medicines. Most of the regular faculty, however, led by such men as Patin, believed in bleeding, and here is Patin's defence: "Our Parisians," he says, "take little exercise, drink and eat too much, hence they become plethoric. In this condition, they are almost never relieved of their diseases, if powerful and copious bleeding be not used." Besides, he adds: "For the frequent bleedings practised here, they are due to the universal debauchery and the too good-cheer that abounds. We do not bleed from custom, but from necessity, according to rules and regulations. The pretended reformers and legislators are always complaining, but give no substitute remedy. It is not a great thing to tell a man the right road to take, but it is necessary to place him on the real road he is to travel. Some foreigners blame our frequent bleedings;

they know neither the cause nor the fruit nor even the necessity of the procedure. If we bleed too much, let them give us a remedy that will take its place; and what other remedy will equal bleeding? In writing, let those dissatisfied speak out. God even suffers tyrants, usurers, and those who take His name in vain to live.

For Cure of Insomnia.—Repeat twelve times the following:

Like the passionate palm that breathes all the odors of day
To the soul of the night;
Like a river that runs and frets on its turbulent way
To the quiet deep;
Like the swallow, weary of cold, that southward gleams
To her land of delight,
So the heart overfull of its sorrow flows over in dreams
Of compassionate sleep.

RUTH JOHNSTON, in *March Lippincott's*.

The Section in Gynæcology and Abdominal Surgery of the Pan American Medical Congress has been organized by the election of Dr. William Warren Potter, of Buffalo, as executive chairman; Dr. Brooks H. Wells, of New York, as English-speaking secretary; and Dr. Ernst W. Cushing, of Boston, as Spanish-speaking secretary. The foreign secretaries of the section thus far elected are: The Argentine, Dr. Dn. L. C. Maglioni Llobet, Victoria 737, Buenos Aires; Brazil, Dr. Dn. Luiz da Cunha Feibo, Rio de Janeiro; British North America, Dr. J. F. W. Ross, Esq., Toronto; United States of Colombia, Dr. Dn. José M. Buendia, Calle 10, No. 212, Bogotá; Nicaragua, Dr. Juan I. Urtecho, Calle Real, ciudad Granada; Spanish West Indies, Dr. Dn. Gabriel Casuso, Virtudes 37, Habana, Cuba; Uruguay, Dr. Dn. Enrique Peréy, Uruguay 371, Montevideo.

The Pan-American Medical Congress in the West Indies.—Dr. William F. Hutchinson, Assistant Secretary-General of the Pan-American Medical Congress for the West Indies and Venezuela, is now on a tour of the Antilles in the interest of the Congress. Writing from St. Kitts under date of February 25th, he transmits a report of formal action by the profession, under the presidency of Dr. Branch, President of the Leeward Islands Branch of the British Medical Association, cordially approving of the object of, and pledging sup-

port to, the Congress, and nominating certain officers. At St. Thomas, Danish West Indies, Dr. Mortensen, King's Physician and member of the International Executive Committee of the Congress for these colonies, is securing the most hearty co-operation of the profession. Dr. Hutchinson has had equally enthusiastic receptions at Santa Cruz and at Philipsburg, the latter on the Dutch island of St. Martin. In several instances the governors of the colonies have expressed a warm interest in the Congress, and will designate delegates.

Local Medical Matters.

A Thick Skull.—In a post-mortem examination, recently held in St. Louis, it was found that a negro woman had apparently died from meningitis. The cause was supposed to be due to an extraordinary thickness of the skull. It is alleged that it was one inch thick in its anterior portion and two inches at the occiput.

Superintendents of City Institutions have at last been confirmed by the St. Louis City Council as follows:

Dr. H. Marks, Superintendent of City Hospital.

Dr. R. M. Kerley, Superintendent of the Female Hospital.

Dr. E. Mueller, Superintendent of the Insane Asylum.

All of these gentlemen have qualified and are in the full exercise of their functions as we go to press.

Medical College Commencements.—Three colleges held their commencement exercises during the month of March, as follows:

The St. Louis Medical College held its exercises at Memorial Hall on March 10, the graduating class numbering 18.

The St. Louis College of Physicians and Surgeons held its commencement, at Entertainment Hall, Exposition Building on March 14, diplomas being conferred upon 83 graduates.

The Missouri Medical College held its exercises at the same locality as the preceeding on March 15. A total of 19 graduates received their diplomas.

The Beaumont Hospital Medical College held its annual commencement at Memorial Hall, 45 graduates receiving their diplomas.

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Original Contributions.

IMPETIGO, THE EPIDERMAL ABCESS CAUSED BY PUS-COCCI. A paper read before the Aertzliche Verein of Hamburg, Germany, by Dr. P. G. UNNA, January, 12, 1892. Reported especially for the ST. LOUIS MEDICAL AND SURGICAL JOURNAL.*

GENTLEMEN: I have chosen for my theme, to-day, Impetigo. I have done this for two reasons; on the one hand, because the infection of the skin by pus-cocci has an eminently practical value and the knowledge of it should be possessed by every physician; on the other because in scarcely any other manner can I so well illustrate the superiority of our modern methods of experimental study over the old historic-dogmatic manner of observation.

Impetigo, as a separate and distinct disease of the skin, existed from the end of the last century up to somewhere in the sixties of the present one,—that is to say from the time of Willan's definition of the varieties of impetigo, up to the time when Hebra issued his work of reference. Then upon the dictum of this master it lapsed into oblivion from which, after a twenty years' sleep, it was, in the year 1887, again called to life by Bockhardt.

The meaning of the term (impetigo) had, however, changed very much from what it was in the first period of its existence. It is manifest, for instance, to every reader of Willan's or Bateman's works, that the conditions called by them *impet-*

* Translated by Dr. Oscar Treutler, St. Louis.

igenes figuratæ, *i. sparsæ*, and *i. scabidæ* are nothing more nor less than very badly inflamed and crustaceous forms of what we of to-day call eczema.

The impetigo pustules of these authors appear in groups upon an inflamed base; they itch and burn; their pus is not inoculable, after the pustule breaks or is opened and emptied no more pus forms but in its place there is a serous liquid which dries and forms a squamous covering or crust, which disappears with the process, leaving a tense, red and shining epidermis, which soon again becomes the seat of yellow vesicles.

Willan's and Bateman's *impetigo figurata*, with its seat of predilection upon the extensor surface of the hand, between the metacarpals of the index finger and the thumb, is merely a classical description of the confluent, inflamed eczema so often found upon the hands of adults following the mechanical trades. The same may be said of those "pustules which do not differ from eczema vesicles in size, which coalesce and produce thin scales" which Willan called *psudracis*, in order to distinguish them from the large pustules.

If, on the contrary, we wish to find in Willan's work, a description of the large, simple, isolated pustule which corresponds more closely to our conception of impetigo, we must look for it in the chapters on *Porrigo* and *Ecthyma*. There under the term **Porrigo favosa* we find a description of the large, soft, straw-yellow, some what flat (generally), irregularly contoured pustule, with a slightly inflamed areola which at first appearance is isolated but later spreads, becomes confluent, takes on a greenish-yellow crust which agglutinates the hair, becomes fœtid and is the play-ground (*Tummelplatz*, pic-nic grounds, so to speak) of vermin.

This pustular disease usually attacks children, the head being almost always the site, from which it extends to the ears, face and neck; thence if not checked it attacks the whole body, even to the tips of the fingers. It is inoculable, passing by contagion from children to their nurses and causes glandular tumefaction.

While it is very possible that *Eczema capitis* might present itself under such a clinical picture, yet the elder Hebra, in his critique (of Willan), subsequently treated the subject very

* We must not confound this term with our *Favus* (*Porrigo lupinosa*, Willan.)

cavalierly (*that es sich zu leicht gemacht*) when he complacently placed Willan's *Porriigo favosa*, and even his *Porriigo impetigenes* under the heading of "Eczema."

Willan then introduced the *achores* as the type of small pus vesicles. These usually occupy the external openings of the hair bulbs and are pierced by a hair. This term (*Achores*) probably fell into discredit because Willan minutely described *achores* under the head of *Porriigo scutulata* (the *Trycophytes* of to-day), and for this reason the opinion might arise that here as in his *Porriigo lupinosa* (the *Favus* of to-day) he had mistaken dry yellow scales for exsiccated pustules (Wilson). It seems to me, however, far more possible that Willan had merely included under one name *trycophites* and other diseases of the scalp which produce baldness. It would certainly be a remarkable lapse in so careful an observer as Willan has proven himself to be, if he had overlooked so common an occurring disease as *impetigines* of the follicle openings.

Lastly, we find described by Willan, under the head of *Ecthyma vulgare*, a disease which may possibly be *Acne pustulata* or *folliculata*, but which, without further proofs, we must include under the term *Impetigo*. Willan describes under this name (*Ecthyma vulgare*) small, hard pustules, occurring usually on the neck, shoulders and extremities, which mature in the course of three or four days, cause sensations of pain, and which after rupture become covered with small brown crusts, finally healing without leaving a scar.

Willan's narrow differentiation between *Impetigo* and *Porriigo* (especially as regards inoculation) was early overthrown, and that by Hebra's great French predecessor, Rayer, who placed *Porriigo favosa* and *Impetigo* together. At the same time, he gave an excellent description of his *Impetigo sparsa* of childhood (the *Teigne granulée* of Alibert), laying particular stress upon the fact that the eruption developes as small, discrete, whitish-yellow pustules, each of which is pierced by a hair. Later confluence occurs, attended by capillary agglutination, pediculosis, etc. He, however, considers the differentiation of this *Porriigo* from the *impetigenous* eczema of the scalp (*Teigne muqueuse* of Alibert) to be very difficult, the chief point of difference lying in the crusts, which in *impetigenous* eczema are said to be round, convex (*bucklig*), yellowish-green in color, and situated upon an irregularly tumefied or

wart-like 'skin '(auf einer ungleichmässigen, wie warzigen Haut), while in *Impetigo* the crusts are brownish or dark-gray in color, and resemble little bits of old plaster.

Here, for the first time, we meet with the hazardous conception of impetigenous eczema. Rayer, personally, is scarcely to be blamed for this mingling of two types. It was a sort of necessity that it should fall out thus. The origin of the muddle lay in the very nature of things and later it made the development of our knowledge all the more difficult. Probably it was already in common use in Rayer's time. Experience alone has taught us, and that gradually, that the pustules of impetigo, with their yellowish-white, and frequently barely turbid contents, occur side by side with the clear eczema vesicles and apparently develop from them. Rayer, therefore, correctly and conscientiously diagnosed an *Eczema impetiginosum*, when he found along side of the impetigo pustule of Willan the eczema vesicle of the same author.* He however, but paved the way for the subsequent action of Hebra, who definitely and positively placed all *Impetigines* under the head of Eczema.

The oftener that a diagnosis of *Impetigo* was rendered doubtful by the fact that the primary efflorescence was not always so sharply and surely defined as Willan had thought, naturally enough the greater the importance that was subsequently laid upon the physical appearances and the differences between the secondary products of disease, to-wit: the crusts. Physicians thus, almost unconsciously, acquired the habit of adding the adjective "impetiginous" to all affections of the skin which were marked by thick yellow crusts, whether those latter were preceded (and caused) by isolated pustules or not. Especially was this the case when they found very moist, yellow and brown crusts covering the scalp, in diseases of childhood. They never went to the trouble of even considering the differential diagnosis of Rayer. In consequence of the undoubtedly near relationship of Willan's *Eczema* and Willan's *Impetigo*, the *Porrigio favosa* of the same author (which also terminates in the formation of crusts) was very unjustly drawn into the all-embracing circle of "Eczema,"

* The clinical history of the case, however, does not correspond with the description of *Eczema impetiginosum* given in his text, and illustrates very probably, an early stage of *Hydroa graviditatis*.

although this latter, when considered by itself, was as far removed from the Impetigo of that day, as it is from the Eczema of to-day. This action buried and removed from the eyes of posterity a good part of the old clinical observations.

But in spite of all this, the true purulent affections of the skin were not entirely forgotten. In the better class of clinics the suspicion that under the so-called "impetigenous crusts" of the scalp there might be something else than a flattened vesicular eczema, did not wholly disappear. Interesting in reference to this is the first assertion of Erasmus Wilson made in his first work on skin diseases, that "all true pustules are differentiated from vesicles by the fact that from their inception they contain only pus."

After such an introductory we have a right to expect a criticism, or at least a more exact understanding of Willan's *Impetigo*, but we are disappointed. Nothing comes of it. Wilson contented himself here, as everywhere else in his first compendium, with a short reiteration of Willan-Bateman's ideas modified after Rayer, and differs from the latter only in so much as Bateman had previously suggested. For instance he places *Porrigolarvalis* or *Crusta lactea* under the caption *Impetigines*, as *Impetigo capitis*, but unfortunately he further on places *Porrigofavosa* in the same class. The admission of the purely purulent nature of pustules, is there, but merely as a glimpse of the truth (*un aperçu*), and so far as science is concerned remained merely a "pious wish."

But even though Erasmus Wilson subsequently accepted, unconditionally Hebra's destructive critique of the Impetigo idea, and in his lectures of twenty years later (1873) styled Impetigo merely "an offshoot of *Eczema pustulosum*, he could not refrain in his lectures of 1871 from expressing the opinion that superficial eczema pustules are worthy of separate study and observation. Indeed, he thus betrays that in giving the quoted definition of Impetigo, he held in the bottom of his heart a consciousness that it was something more than what he stated. It must be conceded that in this brief work of the ripe dermatologist (as compared with his first book), we must look for an expression of his own opinions throughout.

To him (Wilson) at this period Impetigo is an eruption of superficial pustules, ranging from extreme minuteness up to three or four lines in diameter, which develop upon an

inflamed base and finally lead to the formation of pus and thick and yellow crusts. The original postulate that the pustules shall contain pus *from their beginning* is nowhere to be found. Wilson even finds himself forced to advocate their beginning without pus, apparently in view of the definition by Tilbury Fox (which had been published only a little while previously) of *Impetigo contagiosa*—that entirely distinct disease of childhood which corresponds to a certain extent with Willan's "psyracic impetigo," but not at all with impetigo of the present day. *Impetigo contagiosa* begins with vesicles which rapidly spread into large, flat, non-purulent blebs, and it is therefore entitled to a position among the bullous diseases.

By this we see that the clinical test of Wilson persuaded him against giving up *Impetigo* as a separate disease, but that this inner conviction was not reached by a careful determination for himself of a complete and especial clinical picture of a disease differing from eczema. Nor are we indebted to him (Wilson) for our present understanding of Impetigo, even though Bockhart, in making reference to Wilson's maiden effort, (his first work on skin diseases) apparently proves that we are. Regarding *Porrigio favosa* as our *Impetigo*, old Willan has a far higher right and claim to the honor of the discovery. Even Bockhart himself has a better claim than Wilson to this honor. We could, if inclined to go further—but not *deeper*, into the matter mention in this connection other dermatologists beside those great clinicians above named.

We now come to the elder Hebra who so radically side-tracked Willan's Impetigo, and thereby closed its first period. Hebra, Sr., says:

"Erasmus Wilson endeavored to prove a difference between pustules which have purulent contents from their inception, and eruptions which commence as vesicles and subsequently become purulent; and further, that only those of the first description can be regarded as characteristic of Impetigo.* I should like to know, however, by what marks of identification we shall proceed to decide whether a given eruption appeared primarily as purulent points upon the epidermis, or as vesicles which at first contained a transparent fluid which

* Ecthyma is what it should be called, embracing under this term both varieties, which according to Wilson, have true or primary pustules.

subsequently became purulent. The idea, (*i. e.*, Erasmus Wilson's) is merely one of these *doctrinaire* conceits which serve neither to enrich science nor to instruct youth, and which unfortunately are met with only too frequently in dermatology—though to our consolation, not more frequently in dermatology than in other branches of medicine." Hebra, *Sr.*, Vol. I, page 641.

Right here we can answer Hebra that in fact the *pustules of Impetigo* (of to-day), by the very diagnostic signs by which they were formerly recognized (*i. e.*, by Willan, Wilson, etc.), and of which we have yet to speak, give evidence of their primarily purulent character. It is true that we learned this fact through experiments made upon man, and the developments of bacteriology and histology; but Willan could have answered him, even in his day, that a careful and exact clinical observation of the causes of the disease in each individual case was all that was needed in order to determine those eruptions which surely and certainly made their appearance as vesicles (*Eczema*, for instance), and thus by the process of exclusion gradually to define the affection produced by primarily purulent eruptions.

As such observation manifestly was not impossible, but very difficult and tedious, the greater portion of the readers of Hebra accepted his conclusions as facts; not so, however, the logical and impartial men who think for themselves. But Hebra by these very "*doctrinaire*" phrases and conceits which he so strongly condemns, for a long time was able to do a world of mischief, and that through the following conclusion of his:

"This circumstance, that is the impossibility of differentiation between those eruptions which are alleged to be purulent from the beginning, and those which become pustular from primary vesicles or other efflorescences (and particularly when both forms, pustules and vesicles are found in juxtaposition), make it not merely desirable but actually necessary (?) to place all skin diseases in which the aforementioned phenomena occur in one and the same genus or class, and to designate them as *Impetigenous Eczemata*." Hebra, page 641.

This name (*Impetigenous Eczema*), which appeared apparently at a propitious period, served for a considerable time as a potent shibboleth for stopping all further investigation in

this field. This convenient circumlocution has done yeoman service in the past twenty years. An equally important way of jumping at a conclusion do we find wherever and whenever Hebra undertakes to convert *Impetigo* into an airy nothing in favor of Eczema. For instance on page 445 he says:

"Any one can, in any given case, at once convince himself of the identity of *Impetigenous Eczema* with the so-called forms of *Impetigo*, if he will remove the greenish-yellow, gumlike crusts, no matter how formed, found in *Impetigenous Eczema*. He will find * * * the subjacent, red, nascent surface so easily recognized as characteristic of *Eczema rubrum*, and further observation will show him that the oozing liquid will transform itself first into purulent layers and later into new crusts which will again present the characteristic picture of *Eczema Impetiginosa* or *Impetigo*."

Aside from the *petitio principii* of which Hebra is here guilty, (namely in that he *assumes* the identity of the red, nascent surface underlying the crusts in all cases, with that presented by *Eczema simplex*, whereas he should have *proven* this identity by the history of the origin of the case), we may remark that in advising us to remove the crusts and then to form our diagnosis, actually takes away from us one of the very best criticisms by means of which we might form an opinion. As a matter of fact there are present in these secondary products of disease (the crusts) the most important proofs of the nature of the origin of the efflorescence, a truth accepted as a matter of course by the elder clinicians and incontestably proven by the finer microscopical analysis of to-day.

With such reasoning it becomes very easy for Hebra, Sr., to arrive at the conclusion that there is no independent pustular disease, no *Impetigo*, no *Ecthyma*; that every pustule is a secondary product of disease, developed from a vesicle, a "papule," or other primary product of inflammation.

At present, in the days of chemotaxy and microscopical analysis, it is, of course, very much easier to see, as they really are, those things which here enter into consideration, and once more to determine the existence of primary pustules of the skin, as the older dermatologists, before Hebra did. How curious it is that a man of Hebra's eminent powers of observation should have overlooked those things which, before

him and after him, were so easy of demonstration! Not they, (his predecessors), it was who became the victims of the "doctrinaire" conceits, for incidentally in two places in his "System" he introduces as "exceptions" the primary pustule, which in his chief text he declares to be "impossible." In a description of the genesis of the pustule, on page 643, he says:

"In but a few cases have we the right to infer the gathering of pus, as such, under the epidermis,—a phenomenon which as a rule must be regarded as a metastatic one." Again, further on, on page 653 he says:

"These are not distinguishable by any external appearance from pustules formed in a different manner, but, possibly, through their abrupt and simultaneous appearance on the skin without any precedent efflorescence."

Now, if Hebra desired to be consistent, he should have left the name "Impetigo," or "Ecthyma," to these "metastatic" pustules. This is actually what he did do in another instance, in which he acknowledged *Impetigo herpetiformis* to be a pustular disease *per se*. Of this latter disease he expresses himself, in a supplementary way, as follows, on page 655:

"The trouble does not commence with a vesicle, but makes its appearance in the shape of pustules."

If there were really any doubt that the pustules made their appearance without any precedent efflorescence, Hebra's admission is supplemented in this respect later on by Kaposi, who, in his defence of *Impetigo herpetiformis*, undertaken against Duhring, expressly states that "in Impetigo purulent pustules, and only such, are seen throughout the entire course of the disease." (See *Vierteljahresschrift fuer Dermatologie und Syphilis*, 1887, page 277), and with this, gentlemen, we have again come back to the stand-point of Erasmus Wilson.

(TO BE CONTINUED.)

Some Microbian Crank has started the idea, says an exchange, that the beard is a prolific source of infection, and it is said that whiskers are disappearing from the faces of doctors. Why not shave the head in order to become aseptic? It would seem a good time for bald heads to be the fashion.

PNEUMONIA. By E. S. McKEE, M. D., Cincinnati, Ohio.

Shaeffer¹ reports a case of herpes ophthalmicus which came on five days after a left-sided croupous pneumonia. The doctor believed with Weigert and Kaposi that herpes zoster is an infectious disease and that erysipelas, pneumonia and zoster are children of the same genus epidemicus.

Aufrecht² reports cases of hæmiplegia following pneumonia of the superior lobes in children. He considers that, similar to what occurs in uremia, the pneumonia paralysis is occasioned by extension of the œdema into the brain substance. This is rendered possible through the changes in the blood and is especially easy of occurrence in pneumonia of the superior lobes as in this case the flow of the venous blood to the heart is made more difficult.

Phillips³ reports an interesting series of cases where acute non septic pneumonia followed as a complication of the puerperal period.

Olivia⁴ describes pneumonia with icterus in three different classes, viz: pneumonia with icterus in consequence of venous stasis in the liver; pneumonia with icterus from stoppage of the gall duct; pneumonia with icterus from general infection.

Kidd⁵ affirms the existence of subacute lobar pneumonia distinct from the acute classical type, characterized by a tendency to fibrous and necrotic changes in the lungs. The indurative process may be mainly or exclusively interstitial, it may be represented wholly or in part by organization of an alveolar exudation, or may comprise both of these lesions. The anatomical differences may imply a corresponding difference in ætiology but for clinical differences both forms may be included under the title indurative pneumonia which indicates the characteristic features common to both.

Tidball⁶ speaks of the importance of the pulse as an index to the condition of the heart in pneumonia. If frequent or slow or compressible it shows debility of the heart muscle,

1. Münchener Medicinischer Wochenschrift XXXVI, 1889. Schmidts' Jahrbuecher, Bd. 226 I, 1890.
2. Archiv fuer Kinder Heilkunde, XI 4, p. 241, 1892. Schmidts' Jahrbuecher, Bd. 226 No. 2, 1890.
3. Transactions London Obstetrical Society, XXXI, p. 171, 1890. Schmidts' Jahrbuecher, Bd. 227, No. 9, p. 253. 1890.
4. Gazzetta degli Ospitali, No. 58-58, 1889. Centralblatt fuer Klinische Medizin, Nov. 30, 1889.
5. Lancet, April 5, 1890.
6. Medical World, May, 1890.

and the change of position from reclining to upright, or the *change of position* coupled with the exertion attending the use of the vessel to evacuate the bowels or empty the bladder may so distend the heart that in the debilitated condition of its walls, the muscle is paralyzed or a clot is formed or both these conditions may be present.

Cimballi⁷ concludes that delayed resolution in pneumonia occurs in debilitated individuals particularly in malarial cachexia and almost always in severe cases, as a result of cardiac weakness; after the crisis the physical signs remain unchanged sputum pneumonic and often there are occasional evening rises of temperature. The author thinks that a pneumonic lung where resolution has taken place forms a favorable nidus for the growth of the tubercle bacillus and on this account patients in this stage are to be carefully guarded against tubercular infection.

Mosney⁸ presented to the Paris Academy of Medicine a clear case of erysipelalous pneumonia which occurred in a girl, who while nursing a patient with facial erysipelas was taken with the pneumonia and died in two days. The autopsy showed a very limited area of lung tissue which presented the lesions of broncho-pneumonia demonstrated by histological examination. Bacteriological cultures showed characteristic colonies of the streptococcus of erysipelas without the presence of any other micro-organisms. Other cases were reported. Laboullière reported six persons successively taken with pneumonia, all ending in death. He thought there was no question but that the contagious agent was the micro-organism of erysipelas in every one of these cases. A similar case was also mentioned by Mosny as reported by Strauss.

Brouardel⁹ reports a case of erysipelalous broncho-pneumonia which he thinks is the first in which this origin of this disease has been conclusively demonstrated.

Heimann¹⁰ and Menzies¹¹ report cases of pneumonia resulting from injury.

7. Muenchener Medicinische Wochenschrift, Feb. 18, 1890. Am. Journal of the Medical Sciences, XCIX June 1890; p. 625. Wiener Klinische Wochenschrift, Jan. 16, 1890.

8. La Semaine Medicale. Feb. 12, 1890. Medical News, April 5, 1890.

9. Gazette des Hopiteaux, Feb. 18, 1890. British Medico Chirurgical Journal June, 1890.

10. Berliner Klinische Wochenschrift, Oct. 6, 1890. Weekly Epitome, Oct. 18, 1889.

11. British Medical Journal, Nov. 22, 1890.

ÆTIOLOGY.

Mosler¹² in a paper read before the Greifswald Medical Society gave in detail a series of acute pneumonias in a family where there seemed every reason for believing that contagion was the cause of the spread of the disease. He thinks the father acquired the disease outside and it was conveyed in turn to the members of his family through the sputa. Examination by Professor Garwitz of some of the fluid drawn from the lung showed bacilli resembling rabbit septicæmia but neither the pneumonic bacillus of Friedlaender or the pneumococcus of Fraenkel was found. He believes that many varieties of poison may give rise to pneumonia but that the main lesson in the case is the contagiousness and the need of a careful disposal of the sputa by disinfection or otherwise.

Pietrzikowski¹³ calls attention to the frequency of pneumonia after strangulated hernia, both when relieved by taxis and by herniotomy. He records clinical observation made on four hundred cases. The result of his experimental observation was that of 150 dogs in which artificial herniæ were made and then reduced, ten showed marked lesions of the lungs and in six lesions of the liver were observed. In all cases thrombus was the cause.

Buchmueller¹⁴ reports on an epidemic of pneumonia in which he could not exactly point out a contagion from person to person, but was of the opinion that the exciting cause of the disease spread over the place like a kind of miasma.

Williams¹⁵ is of the opinion that pneumonia is a blood and not a lung disease, and resembles in its course the zymotic diseases.

Gynne¹⁶ reports an epidemic of pneumonia which occurred in Sheffield. In some cases it was possible to trace the attack to distinct infection.

Townsend¹⁷ reports a long list of cases occurring in Boston which though many of them may be simply coincidences some at least bear out the idea of infectiousness as regards acute lobar pneumonia.

12. *Lancet*, Jan. 25, 1890.

13. *La Semaine Médicale*, March 21, 1890.

14. *Oesterreicher Aertzliche Vereins Zeitung*, 1-3, 1890.

15. *British Medical Journal*, Jan. 18, 1890.

16. *British Medical Journal*, Nov. 1, 1890.

17. *Boston Medical and Surgical Journal*, March 27, 1890.

Herbert¹⁸ reports a case of pneumonia from a peculiar cause. A young Arab died shortly after admission. Post mortem showed lower left lung in a state of grey hepatization. In dividing the root of the lung, a common male round worm was cut across; its tail end lay in the main bronchus whence it extended downwards into the posterior part of the lung into successively smaller tubes to its head which filled the tube in which it lay. The worm was alive, 4.75 inches long and paler in color than three other large female ones found in the stomach and duodenum.

Bozzolo¹⁹ reports having found the diplococcus in the milk of a patient who was suffering from pneumonia.

Sokoloff²⁰ after careful observations on 2,360 cases concludes that there can be no doubt that croupous pneumonia is an infectious disease which is, in hospitals, transmitted from patient to patient or from neighbor to neighbor much the same as in erysipelas. By isolation and disinfection he has succeeded in reducing the complications in pneumonia from thirty-five to fifteen in one year. He recommends that every hospital keep special wards for patients suffering from pneumonia and wards which have been occupied by pneumonic patients should only be used by others after the most careful disinfection.

Levy²¹ reports a case of fibrinous pneumonia of congenital origin. The mother died of fibrinous pneumonia complicated with pleurisy and pericarditis. The chest was aspirated and a sero-purulent fluid removed which gave cultures showing the diplococcus of Fraenkel and Weichselbaum. Inoculations were made with the fluid which demonstrated the presence and potency of the germ. The child of this woman born thirty-six hours before her death died two days after birth of hæmorrhagic catarrhal pneumonia with lobar fibrinous pneumonia and the autopsy demonstrated the fact that the pneumonia from which the child died was infectious and had persisted at least thirty-six hours before the child was born. Cultures made from fluid drawn from the left ventricle of the

18. *Lancet*, May 17, 1890.

19. *Bulletin generale de therapeutique, Medic'ne, Chirurgie, Obstetrique et Pharmacie*, Oct. 15, 1890.

20. *Bohnitchnala Gazetta Botkinano*, 29, 1890. *British Medical Journal Supplement*, Oct. 4, 1890.

21. *Journal des Connaissances Médicales*, January, 1890. *American Journal of the Medical Sciences*, August, 1890.

heart and from the right lung demonstrated the presence of the diplococcus; the micro-organisms were especially numerous in the blood and the conclusion was reached that the infant was infected through the mother.

Platani²² has experimented extensively on the ætiology of pneumonia. He has produced pneumonia by inoculating the microbe by the natural passages at the same time favoring the result by aseptic traumatism of the lung through the thoracic parietes or causing the animal to inhale irritant gases, as ammonia, hydrochloric acid, etc. He has found some degree of traumatism at the point of inoculation to be necessary as thus the vital resistance of the lung is weakened. It was not enough that the pneumococcus is simply inhaled and all such experiments failed to produce the pneumonia. Animals after inoculation placed in a frigorific apparatus invariably succumbed after a brief time; they invariably succumbed more readily, had a more elevated temperature and more extensive pneumonic lesions than animals similarly inoculated but not exposed to cold. He then studied the action of chilling alone with negative results.

Crocq²³ declares his disbelief in the causes of the disease being either Friedlaender's bacillus or the diplococcus of Fraenkel and Weichselbaum. His experiments have been negative.

Bordas²⁴ finds the following as the result of his researches. The true pneumococcus is found in all fatal cases of pneumonia. It has also been found in the fluids of the inflamed ear after influenza. The blood contains no trace but the spleen frequently has traces of this micrococcus. The streptococci seem characteristic of bronchitis and broncho-pneumonia of influenza but not of true pneumonia. They differ only by the extent of their multiplication. The disease is infectious and may even become contagious. The bronchitis of influenza according to M. Brodas is characterized by streptococci, the pneumonia by pneumococci.

22. La Semaine Médicale, February 12, 1890. Medical News, April 3, 1890. Giornale Internazionale delle scienze mediche fascicoli V. Bulletin generale de Thérapeutique, December 5, 1889. American Practitioner and News IX, Feb. 1, 1890. Boston Medical and Surgical Journal, Jan. 25, 1890.

23. Lancet, August 9, 1890.

24. L'Union Médicale, February 8, 1890. Provincial Medical Journal, April 1, 1890.

Sée and Bordas²⁵ make an extensive report of their researches for the pneumococcus in the fibrous pneumonia consecutive to la grippe. Their researches lead them to consider pneumonia not only as a local malady of infectious origin, but also as a disease which may become infectious in the sense that it may invade other organs.

Jaccoud²⁶ relates an interesting case where a man suffered from a facial neuralgia associated with an irritation and hypersecretion of the right frontal sinus. These two conditions were coincident and came on with mathematical periodicity, a periodicity pertaining to the day, hour and minute. Recovery was very prompt under quinine. Pneumococci were found very numerous in the secretions. This led him to think of the otitis which occurred in the late influenza but the patient did not have the influenza. According to Netter when one has had the pneumonia he has pneumococci always in his saliva but this patient never had pneumonia. Observations have multiplied which show that the pneumococcus is not noxious.

Debove²⁷ reports a case of meningitis and peritonitis having pneumococci but no pneumonia being present. Netter in discussing the report said that pneumococci in peritonitis was very rare. It did not occur in one hundred and eight autopsies in which he had looked for it. He has met with meningitis with pneumococci in twenty-one out of thirty-three cases and he has collected forty-five cases by other authors in which it has occurred twenty-seven times.

Quesnier²⁸ has examined the lungs in a number of children and adults suffering from pneumonia and he finds the coccus of Fraenkel and Weichselbaum the usual bacterial cause of true croupous pneumonia. This coccus was also found in the majority of cases of true croupous pneumonia.

Devoto²⁹ has made a large number of examinations of the kidneys of patients who have died of pneumonia. He found only inflammatory changes and the Fraenkel diplococcus was never present. He recalls the investigations of Luccatello

25. *La Semaine Medicale*, January 29, 1890. *L'Union Medicale*, February 8, 1890. *Le Temps*, January 29, 1890.

26. *Medical Age*, April 25, 1890. *S'Organa de la Confraternite*, April, 1890.

27. *Archiv fuer Klinische Chirurgie*, XXXIX. *Medical Chronicle*, February, 1890.

28. *Quesnier Lancet*, May 10, 1890.

29. *Journal de Medicine de Paris*, January 5, 1890. *Medical Observer*, November, 1889.

which went to prove that the blood of persons afflicted with pneumonia is generally free from pneumococci.

Canfield³⁰, at the Johns Hopkins Hospital pathological laboratory, Baltimore, has isolated Fraenkel's diplococcus from the blood and tissues of rabbits killed with Dr. Sternberg's sputa. He has also obtained the same organism from rabbits killed with prune juice expectoration.

Sturgis³¹ and Coupland in regard to direct infection assume a wise reserve qualified with skepticism. The vexed pathological question as to whether the disease is general or local, zymotic or idiopathic is approached in a spirit of compromise.

Pignol³² has been experimenting on tracheal injections in the treatment of pneumonia. The patients were subject to an injection of naphthol 0.20 centigrammes to 1,000 of water and the quantity used at one sitting was 200 to 300 cubic centigrammes. One received four injections the other two. The injections were well tolerated and did not cause any complications. The patient said there was an immediate diminution of dyspnoea and shortly afterwards râles were heard in points where there had been souffles. In one case the fever fell while the pneumonia was just commencing. In others there was considerable amelioration.

TREATMENT.

Crocq³³ gives plumbi acetatis in forty centigrammes to one gramme in twenty-four hours. Treatment can be prolonged to fifteen days. The indications for this treatment are pneumonia in a vigorous subject with pronounced inflammatory action with bloody expectoration; also the pneumonia of debilitated and broken down persons, alcoholics and diabetics.

Chittic³⁴ advocates mustard leaves and cotton and an oil silk jacket in preference to poultices which are heavy and wet. He checked the initial chill in one case by two doses of 1-100 grain of nitro-glycerine. He always used the carbonate of ammonia first and alcohol next but resorted to nitro-glycerine when these were unsatisfactory.

30. Memphis Medical Journal, October, 1889.

31. The Natural History and Relations of Pneumonia. Smith, Elder and Company, London, 1890. British Medical Journal, October 4, 1890.

32. Times and Register, February 18, 1890.

33. Gaceta Medica de Mexico, Memphis Medical Monthly, January, 1890. Lancet, August 9, 1890. La Presse Medicale Belge, July 27, 1890.

34. American Lancet, June, 1890. Medical Analectic and Epitome, Oct. 1890.

Cornell³⁵ reports two cases of very severe and sudden onsets of pneumonia which he treated very successfully by phlebotomy. From the one sixteen, from the other eight ounces of blood were withdrawn from the median basilic vein.

Stowell³⁶ in a study of one hundred cases in children under ten years of age has found treatment in unsanitary quarters not so unpromising as would be suspected. Alcohol is not needed, antipyretics weaken a child more than they do an adult. Many mild cases become severe and fatal in spite of treatment and no cases are so bad that the physician should not do his utmost to save. Many cases get well with little care and less medicine.

Waugh³⁷ has had prompt results from thirty grains of citrate of potash and five grains of the nitrate every two hours. He also has the chest rubbed with thapsia ointment fifteen per cent. in oleite.

Bigg³⁸ sums treatment up in the terse statement, sustain the heart and husband the nerve force.

Welch³⁹ treats alcoholic delirium in pneumonia with chloral and digitalis in frequently repeated doses.

Netchaëff⁴⁰ reports favorably on the use of the tincture of capsicum in the pneumonia of alcoholics.

Clemens has great success with the administration of chloroform. At the end of twelve hours the fever is abated. Alcohol may be mixed with the chloroform. The inhalations produce the defibrination of the blood in the lungs and thus prevent hepatization. It has, also, doubtless, a dynamic action on the brain and pneumogastric nerve. A case is also reported by Phillipi.⁴¹

Winnett⁴², Knox⁴³, Carson⁴⁴, Parham⁴⁵, Hodge⁴⁶, Hyten⁴⁷,

35. Montreal Medical Journal, September, 1890. Anelectic and Epitome, October, 1890.

36. Medical Record, November 1, 1890. Occidental Medical Times, Dec. 1890.

37. Times and Register, May 17, 1890.

38. American Lancet, June, 1890.

39. New York Medical Record, June 21, 1890.

40. L'Union Medicale. Pacific Medical Record, June 15, 1890.

41. Bulletin Generale de Therapeutique, London Medical Recorder, April 20, 1890.

42. Canada Lancet, March, 1890. Medical Brief, July, 1890.

43. Peoria Medical Monthly, June, 1890.

44. Medical and Surgical Reporter, March 29, 1890.

45. Southern Medical Record, August, 1890.

46. Medical and Surgical Reporter, June, 1890.

47. Medical Brief, April, 1890.

Bodley ⁴⁸ Pratt ⁴⁹, Waugh ⁵⁰, Collins ⁵¹ favor the use of ergot in pneumonia a favorite combination being with tincture of gelsemium.

Chambers⁵² reports favorably on the continuous use of oxygen gas.

Simpson⁵³ has used with benefit a new form of bleeding which he terms pulmonary phlebotomy and which consists of thrusting the aspirator needle directly into the engorged lung and relieving it of accumulated blood.

GRANULATED LIDS. A NEW, QUICK, AND SUCCESSFUL METHOD OF TREATING THIS STUBBORN DISEASE. By A. D. WILLIAMS, M. D., St. Louis.

The treatment of granulated lids has been the bane of oculists ever since oculists have existed. Consequently any genuine improvement in the treatment of this affection will be hailed with joy.

Lately I have been engaged in developing a new method of treating granulated lids and have now progressed far enough to know that it is a matter of real merit and consequently take pleasure in giving it to the profession.

During the past summer, Dr. Darier of Paris, wrote an article on what is known in Germany as "Sattler's operation" for the cure of granulated lids and published it in a French journal. This letter was translated and republished in an English journal, where I had the pleasure of reading it. Sattler advises that the granulated lids be first deeply scarified and then freely scraped or curetted. In the description of the operation Darier stated that instead of the scraping a Russian surgeon (name not given), suggested that the scarified lids "should be freely brushed with a short stiff brush." The reports of the results from Sattler's operation were so favorable that I determined to try it the first opportunity. Soon a stout, hearty young man from the country came in with lids badly granulated, with ulcers on both corneæ and with so much pain that he had not been able to sleep for over a week.

48. Medical Brief, February, 1890.

49. Medical Brief, July, 1890 and September, 1890.

50. Times and Register, December 29, 1890.

51. Medical Brief, December, 1890.

52. Lancet, May 24, 1890.

53. Lancet, November 1, 1890.

I told him and his father about the Sattler operation, its nature and the rapid recovery it promised, telling him that under the old method of treatment he could not hope to get home under six, and more likely it would be twelve months, and suggested the Sattler operation, to which they readily consented, in spite of the fact that I frankly told them I had never made it.

Under chloroform I scarified all the lids in lines parallel with their free margins. I then brushed their surfaces freely with a short stiff tooth brush, preferring that to the scraping or curetting, as I thought the latter might be destructive to the conjunctivæ. The operation was a very bloody one and before I had finished it the lids were greatly swollen. For want of sufficient details in regard to the operation I had to work in the dark and felt very anxious because I did not know exactly how far to proceed and when to stop. The only directions were: "Scarify deeply and curette or brush freely;" when I thought I had done both sufficiently I stopped. During the brushing the assistant flooded the lids freely with a strong antiseptic solution (corrosive sublimate 1 in 500). I directed the patient to drop into his eyes a weaker solution (1 in 5000) of the same antiseptic every hour. The swelling of the lids in addition to the painful ulcers caused so much pain he could not sleep in spite of the fact that he had not been able to sleep well for a week. An opiate gave a night's good rest. The next morning I found the lids inside covered all over with a thick whitish-gray exudation. The general irritation about the eyes was already better. The antiseptic solution was continued and the opium repeated the second night. After that none was needed as the patient did not suffer and slept soundly. The white exudation disappeared entirely from the lids in six days. The granulations were still present but very soft and evidently rapidly absorbing. I now began to touch the lids lightly once a day with bluestone, continuing all the time the antiseptic solution every hour. The granulations rapidly cicatrized, the ulcers healed promptly and the eyes opened widely. The swelling of the lids, resulting from the operation, went away in about four days. When the patient first came to the city he had to be led everywhere. Ten days after the operation he was walking the streets alone. In just three weeks I dismissed him practically well. The

granulations had absorbed and the surfaces of the lids had practically cicatrized. The balls were bright and clear and perfectly free from all irritation. As I have not heard from him, I conclude he has had no further trouble.

Under the old method of treatment this case would have required at least six months, and probably twelve, to have gotten the eyes into a fairly good condition.

Thinking the matter over, and knowing that the operation is a bloody one, I concluded that I would omit the scarification and rely upon the brushing alone in the next case, believing from what I had seen that that would answer all purposes.

During the fall a young minister called me to see him at his home in South St. Louis. He had been shut up in a dark room most of the time for thirty days, suffering more or less all the time. Both eyes were quite red and irritable with considerable photophobia. All the lids were granulated in a medium degree. I suggested the brushing treatment, as the quickest and surest, to which he promptly consented. I freely brushed all the lids at the same sitting, without chloroform, using instead cocaine solution. This I applied freely before I began the operation and had the assistant apply it during the operation. I used also the same antiseptic solution freely as in the first case. The operation is only slightly painful and can be easily done under cocaine without chloroform. The lids in this case become only slightly puffy. There was comparatively very little reaction. The first two nights I gave small opiates. Ordered the weaker antiseptic solution (1 in 5000) used every hour as in the first case. Next morning there was the same whitish-grey exudation, but not so thick as in the first case, on all the lids. This rapidly cleaned off. About the fourth day I began the daily use of the bluestone lightly, as in first case. The irritable condition present when I first saw the case promptly subsided. The redness of the balls soon passed away and the granulations rapidly absorbed and healed, as in the first case. In four weeks the eyes were practically well; the minister returned to his work and has been at it ever since. The result in this case, of course, confirmed me in the idea that the blood scarification could be dispensed with. Now I would not think of using it again.

Thus the new method of treating granulated lids was first developed. The essential thing in the treatment, it will be

observed, is the free brushing. The medicines used are only unimportant adjuncts, as I think, though I have used them in all the cases I have so far treated. In all, I have treated nine cases by this new method; the last one is still under treatment, but is getting along nicely. The history of the case of the minister is practically the history of all. In some of the cases the reaction was decided, while in others it was very slight. The latter took no opium.

My experience in the use of this method of treatment certainly justifies the following general conclusion: By this new method of treating granulated lids the worst cases can be finished up in from three to five weeks with as nearly absolute certainty as anything human can be, while the old method of treatment requires from three to twelve months with considerable uncertainty in the end. The new method assures a corresponding saving in time and expense to the patients.

It is impossible for me to say exactly how much to brush the lids. I brush them freely and now I am not afraid to do so because I know from experience that practically no contraction or serious reaction follows the brushing operation. The beneficial effects of the operation can only be explained on the supposition that the brushing breaks through the top of the granulations and forces their contents out. Being thus deprived of their essence—their life—they collapse and rapidly cicatrize, as experience abundantly proves. The use of the antiseptic solution is intended to catch and destroy any remaining microbes.

The only instrument used in the operation is a small stiff toothbrush.

Heretofore I have rather shunned bad cases of granulated lids because of the tediousness of their recovery. Now I gladly undertake them because I know by the brushing treatment I can make them get well in comparatively a very short time.

A brief mention of cases. I have already given the details of one and two. No. 3, an old woman with old, partly absorbed, but still bad granulations and pannus. Brushed freely without chloroform. In five days the granulations were completely cicatrized. Of course it took longer for the scums to clean off. No. 4, bad granulated lids. Had been under old treatment for months. Brushed the lids, went home in three weeks seemingly well.

No. 5. Granulated lids. Ulcer on right eye, causing pain. Brushed lids. Patient went home in three weeks in fine condition. Has been working ever since he went home.

No. 6. Left eye-lids greatly swollen and badly granulated. Retrotarsal folds greatly swollen. Ball covered with thick pannus. Brushed lids. Dismissed nearly well in three weeks. Writes that swelling is gone and vision much improved.

No. 7. Both lids granulated, but partly absorbed. Both balls covered with pannus. Double epiphora present. Slit up canaliculi and brushed the lids. Patient improved rapidly and went home on the tenth day in fine condition.

No. 8. Old granulated lids of left eye, partly absorbed. Ball covered with scum. Brushed the lids. Rapidly improved. Dismissed in ten days in good condition.

No. 9. Bad granulations with ulcers and scums. Had not slept for several weeks. Slept well first night after operation. Lids swelled greatly on second, third and fourth nights, then rapidly improved. Went home in twenty-four days. Lids not entirely well but rapidly cicatrizing.

No. 10. Granulations and pannus left eye. Lids brushed. Still under treatment, but improving nicely.

All the cases except the first were operated on without chloroform. In all the cases I used antiseptic solution every hour and blue-stone lightly once a day. Only three cases required opiates at night for two nights.

This is a faithful report of my experience with the brushing method of treatment and I must say that it has given me and my patients great satisfaction.

The American Climatological Association will hold its meeting at Richfield Springs, New York, June 23, President, Dr. Willis E. Ford, Utica, New York.; Dr. J. B. Walker, Secretary, 1617 Green street, Philadelphia.

A New Medical College is to be opened in Columbus, Ohio, in September next. It is to be a department of the Ohio Medical University. We understand that Dr. R. H. Reed will hold the chair of surgery in all of its departments. Recitations and clinics will constitute the method of instruction.

HOMŒOPATHY. By A. R. HAYWOOD, M. D., St. Louis.

For all time, both past and present, there has been, and will continue to be perhaps on the part of suffering humanity a predisposition to belief in the supernatural and mysterious connected with the healing art. This tendency, it appears, has existed since the time when mankind first fell a victim to disease and affliction and on this account has been and ever will be a prey to mystifiers and so-called medical wonder-workers. From the very time of which we have any authentic record, the study of medicine has received the careful and conscientious attention of the wisest investigators, and has engaged and occupied the thoughts of the ablest minds of all ages, and under their superior guidance and direction it has advanced steadily and surely in its evolution as a science, and though like many of the other known arts it has passed through many dark sieges and has been often lost and revived, yet let us hope and believe that in each succeeding era of its history it has progressed, step by step in its approach to an exact and established science.

It is not so much the purpose of this article to make war upon those engaged in the practice of Homœopathy, as upon Homœopathy itself, for many of its advocates I believe are hopelessly and honestly deluded and others there are who are such only in name: but I do propose to expose if possible the utterly false and unreasonable nature of the position Homœopathy occupies and the delusive nature of the doctrines and methods it professes.

This bastard and illegitimate theory of the practice of medicine was first distinctly advocated and adopted by the German malcontent and practitioner Hahneman, as late as the latter part of the last century, who, himself, to his far-fetched, visionary and untried theories surrendered the established experience of years in the regular practice, and though the conception was not original with him, assumed, with bombastic and intolerant assurance that *his* method of "*similia similibus curantur*" was the only sure and simple way; but his wandering vagaries did not stop here, shrewdly recognizing the absurdity and patent falsity of the universal doctrine of "*like curing like*," and fearing its true and practical tests, by the exhibition of medicines in disease in the same quantities as were commensurate with their known and

observable physiological effect, he further tried to strengthen his position by the theory of infinitesimalism. He maintained that the therapeutic and physiological effect of drugs differed in that certain medicines given in disease expended their power in supplying the morbid manifestations instead of producing like symptoms as they did when given in health, and that this end might be best attained, it was necessary that medicines should be given in the highest possible degree of attenuation, which is, at last, nothing but a practical acknowledgment of the impracticability of the whole scheme and leaves nothing for Homœopathy to rest its claims upon save a blind and unquestioning credulity. Despising all serious ponderation, Hahneman taught that disease was a certain subtle, intangible and spiritual something that could not be combated in a material way, but must be overcome by some strangely inexplicable, spiritual, and fluidic power of medicine possessed only in a very high state of division; which doctrine, we must confess, is quite spiritual in its nature, for to pursue his logic to its legitimate conclusion and to dilute one grain of a given substance to the degree he advocates, it would require all the space 'twixt here and the farthest nebulae of the remotest planets to hold the ocean of water necessary for such a purpose.

Moreover, Homœopathy represents the only school of medicine that we know of that, whilst laying claims to respectability and seeking place in the ranks of the recognized sciences, at the same time owes its origin to, and appeals to for its support and perpetuity, this self-same superstition and ignorance concerning medicine amongst the laity, that we have spoken of, though it endorses or pretends to endorse the scientific truths of the fundamental and basic principles of regular medicine as taught by the standard authorities on the subjects of anatomy, physiology, chemistry, hygiene, etc., yet it refutes the rational conclusions deducted therefrom and on which was founded the wholesome and ripened experience of hundreds of years of assiduous study at the bedside: and forsaking fact for theory tries to build upon a sure and firm foundation a new-fashioned and grotesque edifice that is as foreign to its predecessor as a Chinaman to a church pew, and like the fabled gods of old, tries to place upon the fair and honored Esculapian form the head of a monster and bow to it in worship as the true and original idol.

It was a long time before Hahneman achieved any degree of success in his new practice. After moving about from place to place, he finally located in Paris, where his methods soon became well known and were patronized by the nobility as well as laity, and quickly made for him a fortune and reputation. From this time on the votaries of the new school became numerous and widespread, and to-day offers one of the most lucrative—if not *honorable*—fields for practice.

It is a notable fact that Homœopathy has never been countenanced in Germany, the place of its birth, and we may say the seat and fountain head of a greater part of authentic medical literature, nor has it ever received, so far as we know, the official endorsement of any government or nation, yet it has been considerably patronized in the old world as well as in this country, and has received a goodly part of public favor: yet viewed in the light of ancient and modern medical thought and under the beating and piercing rays of modern scientific research Homœopathy, we feel justified in saying, stands to-day but little removed from the methods and practices of the quack and medical impostor who profits by the superstition of the unknowing, and after all means upon the part of those who practice it either a knavish or stultifying submission to the powers that be.

220 N. Broadway, St. Louis, April, 1892.

"Dr." John Malok, of Chicago, is to be commiserated (*Med. Standard*). He incorporated a "German-American Homeopathic College" at the lavish expenditure of \$6 50. The college was opened with prayer and located over a beer saloon.

"The spirits above were spirits divine;
The spirits below were spirits of wine."

Soon after the "opening" of the "college" these spirits malign began to persecute him. They inserted advertisements in Berlin (Ger.) papers offering diplomas cheap. Through their machinations a midwife deposited \$400 with the college as a fee for a professorship which somehow disappeared. The German advertisements caused the deposit and disappearance of \$100 which a deluded man says he paid to "Dr." Malok, but the latter claims to his malign enemies. This "truly good" man has been sued for several similar disappearances of cash. The college is defunct but the hand of the law is lifted threateningly over "Dr." Malok, who will probably never get another Hahnemaniac diploma nor give one.

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THE MISSOURI MEDICAL ASSOCIATION.

The meeting of this Association will take place at Pirtle Springs this year and its sessions will be held May 17-19. From the present outlook everything points to a large attendance and we understand that quite a number of valuable papers have already been promised. We desire to call attention to a few points in connection with this meeting and they are of such a nature as, in our opinion, to increase the efficiency of the Association in several respects, increase the annual attendance and make the meetings more interesting.

The first point to which we desire to allude is the subject of membership. As it is now constituted the Missouri State Medical Association is composed of members who are admitted upon credentials obtained from their local societies. The list of members necessarily changes every year and very few of those whose names appear upon the roster have not been in personal attendance. A change which would be of the greatest benefit to the Association, increasing its numerical strength and contributing to its financial prosperity would be establishing a permanent membership. Not only this but it would add to the prestige of the Association by keeping permanently on its rolls the names of the best and most prominent men in the State thus showing to the outside world that it was representative of the best talents to be found in the medical profession in its confines. This is one of the features which has led

to the prosperity and éclat of some of the foremost State organizations of this country and it would, without doubt, redound to the best interests of our own. The commonwealth of Missouri ranks among the most important of the United States and it is time that its physicians should show that they are worthy of their State. They can do as good work and are fully as capable of scientific pre-eminence as any others, if they will only make up their minds to this effect. State pride, if nothing else, should spur each member to do his best to demonstrate that talent and worth is as susceptible of development and is as advanced in the gateway to the West as it is anywhere else.

Another change which should be inaugurated and one which would lead to an increased membership as well as better work is the devotion of less time to the discussion of general questions and more to the reading of papers and discussions thereon. This is perhaps one of the greatest drawbacks to the success of the Association and we speak advisedly. There are many members who attend for the purpose of hearing papers read and discussed. Many have come to hear a special paper read for the purpose of listening to the views of some one hoping thereby to profit in some way or other. After waiting patiently and listening with Christian-like fortitude to interminable discussions upon legislative topics, our readers can well imagine their disgust upon hearing the particular paper they expected to hear, "read by title," and this is what occurs at every meeting. This state of affairs can be easily remedied by a method which is becoming very popular in many societies simply because it has been found so efficient. It consists simply in referring all such matters to the action of committees and the only requisite is the selection of members for these committees who will discharge their duties impartially and in a manner which cannot excite criticism.

A feature which has greatly interfered with the success of our State Association is the effort made in securing the election of certain members to particular offices. We cannot see what intrinsic merit there can be in being the recipient of any particular office. To our mind, the most humble member who contributes a meritorious paper is certainly a better physician, a greater man in his profession, and in every way more distinguished than the presiding officer who may have acquired

his title to office by fine wire-pulling or the other methods familiar to the ward politician. This acts as an agent which is distracting in its nature and which interferes not only with the attendance but with that interest and attention which should properly be directed to purely medical subjects, the real object for which the Association meets.

This phase, of course, is one whose eradication cannot be accomplished. The ambitious men and their friends will continue to exert themselves in this manner and not until the scientific work of the more serious and a just recognition of this is arrived at can we hope to see a reform in this respect.

It is for these reasons that we hope the profession of Missouri will take more interest in its Association and will exert itself to its utmost to do good work in medicine and surgery and show our cotemporaries the things of which it is capable. The capacity is in us and it is time that it no longer remain latent. We must be up and doing and every physician owes it to the profession in general, to his confrères, and to himself to give the best fruits of his labors to the society of which he forms a part and of which he should be a representative member.

EDITORIAL NOTES.

A SUPPORTER OF THE MEDICAL PROFESSION may be found in Kate Field, of Washington. She says: There are plenty of defects in medical art, and plenty of shortcomings. If an all-wise Creator couldn't make a human frame perfect enough to keep in order through all the hardships we put it through, it seems pretty audacious to demand of the poor human being who puts us in repair from time to time, that he should make *his* work permanently effectual. Of one thing, too, we may be certain. No profession is followed so largely for the love of it by all classes of its members as medicine; and again, that no other skill and learning is so often exercised without the faintest hope of reward as the experienced judgment of the average physician. If doctors were really the hypocritical experimenters that humorists in robust health seem to think them, they should yet command our respect for their professional enthusiasm and their philanthropy.

TOBACCO SMOKING is still exciting the spleen of some. Another but somewhat feeble attempt has been made to com-

mence a new counterblast against the habit of tobacco smoking, and resolutions have been adopted at a public meeting to found a National Anti-tobacco Society, appointing Dr. Drysdale president, and Mr. Forbes secretary, and electing a committee to carry out its objects. So far as those objects are connected with the desire to prevent the abuse and excess of tobacco smoking among the young it will have general sympathy, but beyond this few will care to go, and the society is likely to fail in doing any good which tries to do too much. Tobacco smoking is a habit in which divines, philosophers, and doctors have found solace and comfort for more than three centuries; it is practised so widely and so universally that it is idle to quote a few isolated opinions against it or fanatically to denounce it as pernicious. The universal experience of mankind has settled the question on quite another footing. Tobacco has taken its place as meeting a universal taste and conferring a "privilege" appreciated by thousands, and, unless Dr. Drysdale and his associates desire to be classed with the body of harmless fanatics, they should address themselves to those excesses of smoking which are manifestly injurious, and should avoid the attempt to do the impossible by aiming at suppressing smoking altogether.

LAWYERS AND DOCTORS were recently compared in Dublin. At Mr. Croly's banquet in Dublin recently, Lord Ashbourne responded for the Bar, and in the course of his remarks said there were points of contact between the medical and the legal professions (*Brit. Med. Jour.*). Barristers, no matter how busy they were, liked to appear more busy than they really were. He supposed it was no disparagement to the medical profession to say that they were similar, and, if he traced them out, there would be found other points of contact. The legal profession was a richly endowed one. They had high salaries and great prestige, but the medical profession had no such prizes. Let them look at the dispensary doctors. They got public money measured out in small doles with slow, meagre hand. They had no red ribbons, but many "scarlet runners" (red tickets); and if they went to the highest positions, they would find that they fell far short of the prizes that were esteemed worth winning by the best men in the legal profession. When he came to consider the Bench, he was unable to find in the medical profession with men as able, with learn-

ing as great, with sense of duty as high—he was unable to find in it similar honors and dignities. Lord Ashborne's appreciation of the profession is worth noting, and his recognition of the fact that the big prizes go to the lawyers is valuable. Perhaps it may bear fruit in due time. His allusion to the dispensary doctors shows that he has been reading the tale of their miseries, and that he recognizes at least the force of some of the complaints. As he is a member of the Cabinet, the head of the judicial bench in Ireland, and an Irishman acquainted with the circumstances of the dispensary medical officers, he might use his powers advantageously in inducing the chief secretary to try to remedy some of the admitted wrongs of the service.

RIGOROUS EXPERIMENTS may be of much scientific value but they are often of a nature of a hardship. Interesting and perhaps important in point of utility, an experiment lately carried out in the Russian army must come dangerously near to censure if tried in the light of humanitarian principles (*Lancet*). In order to ascertain whether tents would suffice to shelter troops in the field during severe winter weather, eight soldiers chosen at random, were, it is stated, made to pass the night, or as much of it as they could endure, under such conditions. Every care seems to have been taken to provide these men with warm and heavy clothing, and the snow within the tent was beaten down and covered with mats and straw. The men slept comfortably from nine in the evening until nearly four next morning, at which hour the thermometer showed that the temperature, originally registered at 31° F., had fallen to 4° below zero, within as well as outside the tent. Nature could then endure no more; sleep was impossible, and the soldiers only saved themselves from freezing by taking exercise in the open air. Everyone can understand the bearing of such observations on practical warfare, and we would not lightly disparage their useful intention. Nevertheless, it is something new to find the human species thus subjected to such an *experimentum in corpore vili*, and we sincerely hope that military necessity will not—as we believe it should not—call for its repetition. The recorded experience of arctic voyagers—who have often camped out in tents—may surely now suffice for evidence as to the amount and quality of clothing

and of tent appliances required to withstand the extremes of winter cold.

THE VELOCITY OF MIND is a mental quality whose correct interpretation is still *sub judice*. French scientific circles have been regarding with some interest the phenomenal exploits of one Jacques Inaudi, whose powers as a lightning-calculator seem to surpass those recorded of the calculating-boys of former days. The abnormal rapidity of Inaudi's mental operations has naturally attracted attention to certain questions of more or less interest connected with the time-relations of mental processes (*Physician and Surgeon*). Inaudi possesses the wonderful gift of being able to solve arithmetical calculations with prodigious rapidity, and unlike some of his similarly-gifted predecessors, he appears able to give a reasonable explanation of the methods he employs; so that his case becomes especially suitable for investigation. When asked how he contrived to multiply instantaneously one long row of figures by another equally long, he explained that he multiplied from the left just as one usually multiplies one hundred by ten. When asked to name the day of the week a certain day would fall several years hence, he replied immediately though he employed a method that would take an ordinarily-minded individual several minutes to carry out. To what is this abnormal rate of mental speed due. The employment of recognized methods of calculation negative any idea that the result is due to an association of intuitional elements. Inaudi's processes are fundamentally empirical, and their apparent instantaneousness in reaching a result is simply due to abnormal mental speed. Inaudi illustrates in an extreme degree, the common every-day fact, that great differences prevail in the velocity of individuals' perceptions. No two people take quite the same time to understand an interrogation; no two children are quite the same in quickness of perception. The Irishman is reputed quicker in his appreciation of a witticism than the Scotchman, although the latter may retaliate by a more rapidly correct estimate of the possibilities of interest semi-annually compounded. The velocity simply differs in the order of thought. Are we becoming more rapid-minded? Is education a process which conduces to permanent alteration in the velocity of perceptive and conceptive ideation? Probably the Brahmins of India present the best example of a class long-

trained in intellectual habits, and while the Brahmins are manifestly elevated by mental superiority above other classes in India, they do not exhibit any distinct peculiarity in acuteness of perception, nor do they commonly produce minds of Inaudi's type. Inaudi himself claims no hereditary bias in favor of his strange gift; his father could neither read nor write. So that any such abnormal mental quality as his must be classed as a *lusus naturæ*, the key to the interpretation of which is as yet withheld.

Microscopy.

Practical Microbiology.—I.*

Although the clinical applications of bacteriology are emerging from the shade of the laboratories and expanding into the practical medical community, this necessary popularization of an incomparable process of diagnosis makes but slow headway. The exceedingly exaggerated ideas hitherto prevalent, concerning the difficulty and complexity of the operations of bacteriological technique are not the least of the causes that have stood in the way of the progress in this direction. How many a physician who affects to disdain or doubt the value of the "pursuit of the microbe" would be converted at once at the surprise of success achieved at his first effort! It can scarcely be repeated often enough, that the methods are within the reach of every one; they represent the most facile and not the least useful applications of the microscope to pure clinical study, and to deprive oneself of them would be as foolish as to refuse to practice auscultation, the use of the clinical thermometer, or the laryngoscope.

The following conversation illustrative of this point is not imaginary, but a faithful report, as near as I can recollect it, of one that I held with a brother practitioner. As for that, however, it is only what is to be heard almost any day between an "initiate," and a timorous brother who believes himself unworthy to penetrate into the sanctuary.

"Why don't you take up bacteriology? I do not refer to the high ambitions of cultures in agar-agar, or on potatoes, or the secret mysteries of inoculations on guinea-pigs, etc. That, of course, is the domain of the elect, the little frequented

*By Dr. Paul Raugé, in the *Bulletin Medical*.

road which leads to 'discoveries.' I refer simply to the utilitarian and prosaic search for bacilli in the sputum of your phthisical patients, the gonococci in the urethral canal of your blennorrhagias. If you only knew what satisfactions you deny yourself, what diagnostic certainties you are throwing away!"

"I know it, and I dream sometimes of undertaking the study. I will even confess that in the happy days gone by of *tuberculin*, I had formed the project of spending several weeks in the bacteriological laboratory at Berlin, under Professor Koch, who teaches all comers. But I gradually gave up the idea. Your microbes are so difficult to see, much more to prepare. They require such an astonishing degree of skill and everlasting patience—with their staining with fuchsin, bleaching with acids—and then the distinguishing one kind from another or from other minute bodies."

"Much less skill and patience than the analysis of an ordinary section of tissue, not stained or prepared."

"Well—I've got no time to Berlin, and how can I learn without going there?"

"You don't even have to go to Paris, which is much nearer. One simple example would persuade you that you can, without going out of your house, in a very short time have sufficient skill and knowledge in bacteriology to practice all that is required in clinical work. Let us take the most ordinary example—not the most simple, mind you; on the contrary, one of the most delicate—the research of *bacillus tuberculi*."

"Oh, it takes too much time, and you know that we busy practitioners —."

"Three minutes, without hurrying—just about the time that you give to an auscultation, and the result is not less valuable and sure."

"But the instruments, the apparatus! A regular glass blower's outfit!"

"Two watch crystals, a porcelain capsule, and an alcohol lamp."

"Yes, but there's the stains, the bleaches, the mordants, the innumerable solutions, complicated reagents—why a whole laboratory is needed."

"Believe me, the laboratory outfit is as simple as it is economical. To those chemicals which you already have in your

office, sulphuric and nitric acids, ammonia, tincture of iodine, etc., you need only add a few of the anilin colors. These are, as you know, crystalline powders soluble in water or alcohol, and which give a richness of tone and a coloring power of the highest imaginable efficiency. In bacteriology they have nearly dethroned and discarded the old histological stains, vegetable and mineral. The fact which gives their great value to the anilin colors however, is not their beauty or great staining power, but their elective affinity toward micro-organisms. The facility with which all kinds of microbes take up the anilin stains, especially the basic colors, affords not merely preparations of great richness, but also gives us certain elements of differentiation, so that in any given preparation we are enabled to distinguish their nature, and name the diagnostic value of what we see, more surely and certainly by their color than by their shape. One sees at a glance all that is microbic in character spread in deep colors upon a colorless or but feebly colored background. The nuclei of cells alone present a predilection for anilin colors, but so feeble compared with that of the micro-organisms, as to be of no moment.

"You do not need a great variety of these anilin colors. Four or five of the principal will constitute your laboratory stock. With a little (five or ten grams or one to two drams) of gentian violet, the same quantity of methyl violet, magenta red (*fuchsin*) or diamond red (*rubin*), methyl blue, and of that fine yellow, called chrysoidin, which makes an elegant ground or counter stain, you have all that you require."

(CONCLUDED NEXT MONTH.)

The Fuchsinophile Plastidules, or Bioblasts of Altmann. IV.*

Ciliates.—*Paramecium*, an infusorian contained in great abundance in the intestinal canal of *Triton cristatus*. The staining of the mucosa and subjacent connective tissue is always made in a typical manner.

The plastidules are very minute but are clearly shown. They appear rounded or slightly elongated. Among them are found a certain number of others, round or rounded, and

* By Drs. L. and R. Zoja. Continued from MEDICAL AND SURGICAL JOURNAL OF April, 1892.

sensibly larger. The plastidules are particularly abundant in a peripheric zone which represents the greatest thickness upon the side containing the pharyngeal opening, and they decrease gradually the further away from this zone, in such manner that the zone does not completely surround the ciliate. Occasionally irregular files or lines of the plastidules are observed to spread in a radiating manner, converging toward the center of the section, sometimes even reaching this goal. In certain cases these files are observed to bend and thus to define a second zone of regular, clear, rounded spaces, provided with plastidules. The peripheric zone is often occupied by numbers of vesicles, generally oval in shape, about two *mikrons* in length, at the central point of which is a little point (sometimes two of them) colored deep red. This latter phenomenon, most probably, is due to ingested matter. In the midst of the vesicles are seen small plastidules identical with those of the peripheric zone. They are rounded or bacteriform and have a distinct annular body. Near a nucleus there is sometimes a very thin stratum richer in plastidules and in certain sections of *Paramecium* we recognize a tendency of the plastidules to arrange themselves in lines converging toward the extremities.

Opalina Ranarum.—Found in intestine of frog. Coloration of tissues typical. Among the *Opalinæ* the interplastidular substance, the cilia and the numerous nucleiform bodies are colorless. The plastidules are mostly large, often like short, thick bacteria in form, sometimes slightly curved, and always well defined. Very frequently near a well defined plastidule we note a little red spot, well defined but of irregular form (sometimes oval and sometimes comma-shaped). Occasionally there is a single red spot of which the central portion is not well-defined. This feature is constant in all *Opalinæ* thus far observed. The better defined plastidules are disposed longitudinally and converge toward the apex of the organism. They are quite abundant, leaving free, however, a peripheral zone, which like the central part presents many clear lacunes. At the centre there are found, beside, little drop-like masses which are blackened by osmic acid.

Colpoda Cuculus, included and sectioned along with *Amœba*. The plastidules are numerous, elongated (about one *mikron* in length and one-fourth *mikron* in thickness), some-

times more numerous at the periphery of the cell (the anterior portion) and sometimes without special disposition.

Stentor Polymorphus—By reason of their large size these ciliates may be embedded in paraffin in the ordinary manner. At the periphery there are very numerous pigmentary granulations, small, round, disposed in regular festoons, strongly convex toward the external part. Immediately beneath these granulations the fuchsinophile plastidules are exceedingly abundant, often in size larger even than the pigmentary granulations, round or slightly elongated, forming a range of notable thickness. The central part of the body, full of large vacuoles shows in the trabecules which divide the vacuoles, plastidules, also rounded or slightly elongated, and which reunite with the peripheric zone. In the myophanes, which are very plainly visible in transverse sections, we also see rounded plastidules.

Some preparations, made by inclusion after the technique indicated for *Amoeba*¹, of ciliates living in the stomach of ruminants (*Isothrica prostoma*, *Entodonium bursa*, *E. minimum*, *Displodinium Maggii*, etc.), have shown small plastidules disposed, in the great majority of cases, especially in certain peripheral regions. In these species we frequently see in the alimentary vacuoles bacteria colored like plastidules. The concretions characteristic of *Bütschlia* present themselves as yellowish spherules. In an *Entodonium minimum*, where the central vacuolation was somewhat thin, the plastidules occupied the entire body, although in other specimens of the same species more rich in vacuoles, the plastidules were found disposed almost entirely at the periphery.

(To be continued.)

Virginia Medical Law.—The Supreme Court of Virginia has decided that the medical law of the State is unconstitutional. The case before them at which this decision was given was that of a largely advertised doctor from Boston against whom complaint had been brought by the State Medical Board, alleging that he had no right to practice under the laws of the State.

1. See MEDICAL AND SURGICAL JOURNAL, April, 1892, page 221.

Dermatology and Genito-Urinary Diseases.

Treatment of Psoriasis of Head.—The following treatment is applicable only in cases of limited psoriasis and in the absence of all irritation of the scalp. It is recommended by Besnier and is as follows:

1°. The following ointment should be applied daily to the affected part:

℞ Sapo. viridis,	
Vaselini	℥℥.....100 parts.
Ichthyol	10 parts.
Acid. salicylic,	
Acid. pyrogallio.....	℥℥..... 5 parts.

M.

This should only be applied to small lesions on account of the high proportion of active ingredients.

2°. Cease making applications as soon as any signs of irritation put in an appearance.

The Diagnosis and Prognosis of Syphilitic Disease of the Brain.—Dr. Otto Harmsen has been induced by the scarcity of information relating to syphilitic disease of the brain to publish particulars of nine such cases, which had remained under observation for a year or more in the Berlin clinic for nervous diseases. The *Archiv f. Dermat. u. Syph.*, which publishes the account, points out that the meagre statistics of this affection have often been complained of, more especially by Naunyn. The chief symptoms in most instances were headache, vomiting, vertigo, facial paralysis, aphasia, and hemiplegia. In one case polydipsia and polyuria appeared some years after the primary infection, and serious cerebral symptoms quickly followed. In another case the nervous symptoms appeared as early as two years after the initial sore. Nearly all the cases were cured by energetic anti-syphilitic treatment, this being most marked in a patient never before treated with mercury. It should be mentioned that in many instances a temporary disturbance of the reaction of the pupil was the first and only indication of cerebral mischief, as has been pointed out by Oppenheim.

Pathology of Addison's Disease.—M. Raymond recently reported to the Société Médicale des Hôpitaux, that he had observed a case of Addison's disease in which the supra-renal capsules were sound, whereas the semi-lunar ganglion of the right side was the seat of marked alterations. The patient was a woman of twenty-seven, presenting all the symptoms of Addison's disease. She had bronzed skin with axillary and inguinal adenitis. Upon post-mortem examination the lymphatics of the mediastinum were found very much tumefied. In front of the spinal column a ganglionic mass was found extending from the diaphragm to the sacro-lumbar promontory. This mass surrounded the aorta and had pushed aside the right supra-renal capsule separating it from the subjacent kidney. This capsule was normal, as was also the left. The right semi-lunar ganglion was adherent to this ganglionic mass. Microscopic examination showed that it was invaded by sclerous lesions. The nerve cells were strongly pigmented, full of vacuoles and rarefied. A few were undergoing atrophy. The cord was normal. This case constitutes a new argument in favor of the theory which attributes a nervous origin to Addison's disease. A few years since I had occasion to report a case which, while it showed a nervous origin, also pointed to the sympathetic nature as does the above case of Raymond.

Syphilitic Ulceration of the Rectum.—Hahn (*Deut. med. Woch.*), reports a case of syphilitic ulceration of the rectum in a woman, aged thirty-three; there was also widespread ulceration in the ileum. At the necropsy the mucous membrane was found to be of a blackish green color, and extensively ulcerated for a distance of sixteen cm. from the anus, with but few islets of intact mucous membrane; most of the colon was unaffected. In the ileum, at about 1.5 m. above the ileo-cæcal valve, there were eleven large ulcers with thick callous edges, and at twenty-five cm. above the valve a narrowing of the gut extending over eight cm. There was amyloid disease of the kidneys and spleen, and also periosteal thickenings over both tibiae. Anterior colotomy had been successfully performed during life, and there were free evacuations through the opening. The vomiting, however, persisted, and the author would attribute this to the renal disease. Hahn

belongs to those who think ulcerative proctitis (occurring almost exclusively in women) is seldom really due to syphilis. After other measures have been tried, extirpation of the rectum and colotomy alone remain. Some cases, when of limited extent, can be cured by the former procedure.

The Fatty Secretions of the Skin.—M. Arnozan has imagined (*Annales de Derm. et de Syph.*), a very ingenious method for determining the presence of fatty matters in different parts of the skin. "When small fragments of camphor are thrown into water, they are subject to rapid vibratory moments, which are immediately arrested if the point of a needle which had been rubbed amongst the hair is placed in the water; that is to say, fatty bodies arrest, as if by enchantment, the movements of the camphor. If camphor does not turn round in distilled water, it may be inferred that the water contains fatty bodies, or that the walls of the vessel are oily." M. Arnozan quotes this passage from Malagutt's *Dictionary of the Medical Sciences*, and verified experimentally the fact which has been stated, insisting on great care and cleanliness as regards the water and the vessel used. The method has shown him that in a healthy adult, all the skin of the head, the upper part of the trunk—anteriorly and posteriorly—the shoulders, and the pubes are covered with an oily layer, the other parts of the skin appearing to be quite free from it. On the sternum and the shoulders it is present in very small proportions, and on these parts it is sometimes not found. With reference to recent statements which have been made regarding the functions of the sweat glands, he lay stress on the fact that fat is never present in the palms; whilst in the axillæ it was sometimes present and sometimes absent.

Asparagin-mercury in Syphilis.—Neumann (*Wiener med. Blätter*) treated last year thirty-seven patients, twenty-one men and sixteen women, by subcutaneous injections of this drug. Professor Ludwig prepared the drug as follows: ten grains of asparagin are dissolved in warm water and oxide of mercury added until no more dissolves. The solution is filtered when cold, and the amount of mercury is then estimated. It is then diluted to the required strength of one or two per cent. Unlike the preparation which Wolff used with success more than ten years ago, it contains no excess of

asparagin. The injections were made once a day with strict asepsis, mostly in the interscapular region, one c.cm. of the one per cent. solution, corresponding to 0.010 grams of mercury, being used. Only once was there any induration at the site of the injection. The injections were well borne, and the patients gained considerable in weight. Stomatitis was observed once, and blood in the stools once. In one case a macular syphilide appeared during the treatment. The unpleasant symptoms noted above disappeared on omitting the drug for a short time. Of the thirty-seven cases, thirty had various syphilides and four extensive condylomata. One only belonged to the tertiary period (cutaneous gummata). Two cases with the initial lesion only were treated prophylactically, but in one case a syphilide appeared. The eruptions faded in about two weeks, and disappeared in from three to four weeks. The average number of injections was 26.5, and the average duration of treatment 40.1 days. Three only relapsed. The patient with cutaneous gummata afterwards gave birth to a healthy child. Potassic iodide was given to this patient for several days, as some painful infiltration occurred at the site of injection. Tables setting forth details of the treatment are given. The especial advantage of this drug is that it gets quickly into the circulation, that it rapidly influences the syphilitic processes, and that it is speedily eliminated.

O.D.

Caution in Dispensing Poisons.—The value to a druggist of extreme care (*Bost. Med. and Surg. Jour.*) in dispensing poisonous substances was forcibly brought out in the recent Harris trial in New York. The apothecary was able to show that the assistant who prepared the medicine took from the closet morphine contained in a black bottle, labelled poison; that he weighed out the directed quantity of the drug, and that this operation was witnessed by another assistant. The second assistant testified that he had seen the proper weight in one pan of the scale and just enough morphine in the other to balance it, and that he then noted his observation in a book kept for the purpose.

The Medical Society of North Carolina has changed its date of meeting to May 17, one week earlier than previously announced. It will take place at Wilmington.

Medical Progress.

THERAPEUTICS.

Linseed Oil Emulsion.—

℞ Linseed oil.....	℥xv
Oil wintergreen.....	℥ij
Oil cinnamon.....	℥ij
Powd. acacia.....	℥x
Water.....	℥xxiv
Glycerin.....	℥v
Simple syrup.....	℥x
Dilute hydrocyanic acid.....	℥ijss

M.

Preservative Tooth Powder.

℞ Precipitated chalk.....	750 grains.
Carbonate of magnesia.....	28 grains.
Borax.....	30 grains.
Powdered almond soap.....	250 grains.
Powdered orris.....	76 grains.
Thymol.....	1 grain.
Camphor.....	5 grains.
Oil of peppermint.....	50 drops.
Oil of cloves.....	25 drops.
Oil of lemon.....	25 drops.
Oil of eucalyptus.....	25 drops.
Creosote or carbolic acid.....	10 drops.

Mix the powders thoroughly. Dissolve the thymol and camphor in sufficient spirit, and add; then also the rest of the ingredients, and mix well together.

Inunctions of Iodoform in Pulmonary Tuberculosis.

—The following are two forms in which Flick employs iodoform by inunction in the treatment of pulmonary tuberculosis (*Med. News*):

℞ Iodoformi.....	℥j
Ol. rosæ.....	gtt. j
Ol. anisæ.....	℥j
Ol. morrhuae.....	℥ij

M.

℞ Iodoformi.....	℥j
Ol. rosæ.....	gtt. j
Ol. anisæ.....	℥j
Ol. olivæ.....	℥ij

M.

Headache Powders.—The following are given in the *West. Drug.*:

No. 1.

℞ Acetanilid.... :.....3vii
 Caffeine.....3j
 Sodium bicarbonate.....3ij

No. 2.

℞ Phenacetin.....gr. x
 Caffeine.....gr. i
 One dose.

No. 3.

℞ Acetanilid.....gr. iij
 Caffeine.....gr. j
 Sodium bromide.....gr. viij
 One dose.

No. 4.

℞ Acetanilid.....1 part.
 Phenacetin.....2 parts.
 Antipyrin.....4 parts.
 Dose eight to sixteen grains.

This combination has been found serviceable in specially obstinate cases of neuralgic headache.

Headache Capsules:

℞ Antipyrin.....540 grains.
 Caffeine 90 "
 Ext. cannabis indica..... 16 "
 Hyoscine hydrobromide..... 1 "

Make into thirty capsules and give one every one to three to five hours.

Headache Mixture:

℞ Caffeine.....gr. xx
 Ammonium carbonate.....gr. xx
 Elixir guarana.....3j

One drachm every hour until relieved. For neuralgic headache.

Lamb's Serum in Syphilis.—Tommasoli has conceived the idea of treating cases of syphilis in its secondary stage by intramuscular injections of lamb's serum (*Gazz. d. Osp.*). The serum was separated simply by allowing the blood to stand for twenty-four hours on ice, the amount used for each injection being not less than two c.c., and not more than eight c.c. The treatment was applied in six cases, five of which presented

various cutaneous manifestations, and the sixth had in addition a periostitis of the left external malleolus. The number of injections was in all sixty-four, each receiving at least three, and one thirteen injections. The operation was followed by a slight rise of temperature, and a circumscribed painful induration at the point of injection. The amount and duration of this local inconvenience varied in different patients, but was only in one case (the sixth) so severe as to preclude further treatment. As the apparent result, the author states that the secondary eruptions rapidly and completely disappeared. He is continuing his observations, and promises a further communication on the subject, sufficient time not having yet elapsed to show whether the cures are real or apparent.

Sozo-iodol and the Sozo-iodolates.—Pharmacological and therapeutical experiments with the remarkable substance discovered in 1888, by Trommsdorff, of Erfurt, and called by him sozo-iodol, on account of its being an iodine derivative of sulpho-carbolic (phenol-sulphonic) acid, leave no room to doubt that in it we have one of the most important of recent additions to the medical armory. The further discovery that sozo-iodol forms a definite series of salts with the metallic and alkaline bases, has given a renewed impetus to the interest at first taken in the substance. It has been found by numerous observers, embracing some of the best known of German scientists, that sozo-iodol and the sozo-iodolates are among the most active and intense of antiseptics and that they act without injury to the human organism. For this reason the compound and its salts sprang at once into favor with the antiseptic school of surgeons abroad, and have since been used by them and by practitioners generally in all cases requiring antiseptics, or where antiseptics were indicated. As an injection in gonorrhœa; as a lotion in nasal catarrh, specific or non-specific vaginites; as an ointment in parasitic skin diseases, burns, old ulcers, etc., as a dusting powder in syphilis, and in the thousand and one other diseases and conditions demanding such treatment, the sozo-iodolates of zinc, sodium, potassium, mercury, lithium, etc., have proven of incalculable benefit. The sozo-iodolates are mostly inodorous, and hence, preferable to iodoform, to which they are otherwise superior. The Malinckrodt Chemical Works, of St. Louis, the sole

licensees in the United States and Canada, will gladly furnish further information concerning these preparations, and will send literature, etc., on request.

The Lactate of Strontium in Albuminuria.—Professor Dujardin-Beaumetz treated (at the Cochin Hospital) five albuminuric patients with Lactate of Strontium (Paraf-Javal), giving the salt in two gramme doses only, three times a day, although ten grammes may be given daily. These cases included several of the forms of albuminuria; among them were two cardiac cases and a well-marked case of Bright's disease. In a report to the Paris Academy of Medicine, Dr. Dujardin-Beaumetz said: "In from one to four days I obtained in all of these patients a reduction, *to one-half*, of the amount of albumen in the urine. Evidently we now have a precious medicament for this condition, and one which is sure, potent and inoffensive."

Dr. Constantin Paul in a report to the Academy, July 28, 1891, said in reference to the action of the lactate of strontium in Bright's disease: "It is not a diuretic but it notably diminishes the quantity of albumin while effecting a rapid amelioration of the other symptoms. The number of my cases treated with it is not yet large, but the results are such as to lead me to recommend a trial of this medicament to other physicians." In a later report to the Therapeutic Society (Nov. 11) M. Paul reaffirms his first conclusions and adds: "The Lactate of Strontium (Paraf-Javal) has done excellent service in parenchymatous, rheumatismal and epithelial nephritis; in the nephritis of gouty and scrofulous patients, and in the albuminuria of pregnant or recently delivered women. I have reason to hope for the same excellent results in the albuminuria of scarlatina. *Even the presence of an intense febrile process does not interfere with the action of lactate of strontium in parenchymatous nephritis.*" The best time to begin the administration of the Strontium Lactate, was found to be when secretion of urine was scanty and there was a tendency to uræmia.

The results obtained by Drs. Paul and Dujardin-Beaumetz were also gained by Dr. Bucquoy who reports some cases in which the amount of albumin in the urine was reduced one-half within twenty-four hours after the beginning of the treatment.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

Transposition of Viscera.—Dr. W. B. Cheadle showed the Harveian Society of London, a boy, aged sixteen, who had been admitted into the hospital with pleurisy and effusion on the left side. The position of the heart on the right was at first attributed to mere displacement from this cause, but, as the fluid subsided, it became clear that the abnormal condition was due to transposition, the stomach, liver, and spleen being transposed in like manner. The transposition of the thoracic and the abdominal organs was probably complete throughout. In every instance in which *post mortem* examination had been made and these points noted this was found to be so. Not only was the heart on the right side, but its cavities and vessels were reversed, and the right recurrent laryngeal nerve wound round the aortic arch instead of the left. The left lung had two lobes, the right three. The liver lay on the left side with its lobes reversed; the stomach on the right side with the cardiac end to the right, the pyloric to the left. The cæcum lay in the left iliac fossa; the sigmoid flexure on the right. The left kidney lay lower than the right; the right testicle lower than the left. In one case the patient was left-handed, but in others normally right-handed, as in the present instance.

The Saliva and Pathogenic Micro-Organisms.—Sanarell (*Centralbl. f. Bakt. u. Paras.*) says that, considering the frequent presence of pathogenic micro-organisms in the mouth, it is remarkable that primary lesions appear so rarely there, and that wounds heal so kindly. The first condition has been attributed to the chemical properties of the saliva, to the resistance and regenerative power of the tissues of the mouth, and to the conflict between pathogenic bacteria and saprophytes. The author investigated the properties of the saliva in respect to the growth of the micro-organisms most often found in the mouth. The saliva is shown to possess bacteria-killing properties not unlimited in degree, but dependent on certain conditions, and chiefly on the number of micro-organisms introduced into it. Thus the staphylococcus aureus, the streptococcus pyogenes, the micrococcus tetragenus, and the typhoid and cholera bacillus perished if in small quantities. The diphtheria bacillus and the pneumococcus behaved differently, but the former at length ceased to

thrive and the latter lost its virulence. It is not yet clear to what substance the saliva owes its bacteria-killing properties. The author sums up that the saliva is an unfavorable cultivation medium for certain pathogenic micro-organisms, destroying them (when not too abundant) more or less rapidly, and that it so alters the type in others (for example, pneumococcus) as to render them powerless.

Snake Bites.—Sir Joseph Fayrer, in a lecture at the Victoria Institute (*Brit. Med. Jour.*) on "The Venomous Snakes of India the Mortality caused by them," remarked that the chemistry of snake poison had been studied a great deal of late, and it was shown to be a most virulent poison, which might neither be sucked from a bite nor swallowed with impunity. Many antidotes had been reported beneficial, but experience showed that so far no physiological antidote to snake virus was known, and that when the full effect was produced remedies were of little avail. When however, the poison had entered in smaller quantities, medical treatment might be of service. The cobra, the most formidable of the Indian snakes, was to be found all over Hindustan, and was equally dreaded and fatal wherever met with. There were many other species which were also most destructive to life—notably, the krait, the kupper, Russell's viper, the hamadryas, and the raj-samp. The mortality from snake bite in India was very great. The average loss of life during the eight years ending 1887 was 19,880 human beings and 2,100 head of cattle yearly. Throughout India in 1889 there were 22,480 human beings and 3,793 cattle killed by snakes, while 578,415 snakes were destroyed at a cost of 23,556 rupees. In 1890 there were 21,412 human beings and 3,948 cattle killed, while 510,659 snakes were destroyed at a cost of 19,004 rupees. The average result for all the provinces showed a mortality of one to every 10,155 of population in 1890, as compared with one to every 9,673 in 1889. To reduce this annual loss of life it was necessary to make known the appearance and habits of the poisonous snakes, and to institute proper rewards for their destruction. Until some measures were more uniformly resorted to there would be no material diminution in the loss of human life from snake bite, which could not now be rated at less than 20,000 annually. It was satisfactory to find that the Government of India were insisting upon measures having

for their object the destruction of snakes, but he feared that the proposal to cut down and clear away the jungle in the vicinity of villages could hardly be expected to produce the desired effect. He would suggest that a reward should be given for each poisonous snake killed.

Tuberculosis.—Dr J. W. Dupree states (*N. O. Med. and Surg. Jour.*) that no disease in the whole nosological table rests on a firmer basis of ascertained causation than does tuberculosis; and that the bacillus of Koch is its sole cause is as certainly established as any other scientific fact. The supposition that the presence of the bacillus is secondary to the tuberculous affection is not tenable, in view of the fact that the affection is produced by the introduction of the organism, after it has passed through several generations, by culture out of the body. Koch's experiments have been repeated by so many able and conscientious investigators of various nationalities, and his statements so fully corroborated by their results, that the logical deductions therefrom must be accepted as absolute truth. We know but little of the cycle of life of this bacillus, outside of the body; that it produces spores, we are quite sure; yet, while acknowledging our ignorance of its life history, we claim that we do know that it can be cultivated on artificial media, and that thus removed by millions of generations, from its original source, it is capable, when introduced into the system of healthy animals, of producing a tuberculous condition that can not be differentiated from human tuberculosis.

Just how long tubercle bacilli or their spores can retain their vitality after isolation from their nidi has not yet been ascertained; but that some time elapses before their death occurs may be reasonably inferred from what we know in this respect of other germs. Even should it be determined that separation results in their immediate destruction, it must be remembered that a slight current of air can carry with it not only the germ, but its nidus. The bacillus tuberculosic has been repeatedly shown to possess great vitality, and to be one of the most refractory of germs to the action of the most destructive agencies or germicides. According to Uffelmann, it is kept propagated in appropriate media at a temperature from 99° to 108°, and that it ceases to grow below 50°, or above 108°. Tilleau and Petit affirm that it can live at

temperatures between 86° and 104° and retain its virulence after lying in putrid sputum for forty days, and for 186 days away from the contact of air. Sormani and Voelsch claim that its spores remain unimpaired for 180 days in putrid sputum. De Toma denies this, and says that they are destroyed in from three to nine days. Petri asserts that tuberculous matter will retain its virulence after ten months' drying.

The Knee-Jerk in Sciatica.—Dr. Thos. F. Rankin, in a letter to the *Brit. Med. Jour.*, writes as follows: In about one-third of the cases of sciatica which I have seen during the past eight years, I have found that there has been loss of the knee-jerk on the affected side. For the most part the cases in which I have observed this have been of exceptional severity, but I have also witnessed really sharp attacks when the reflex has not been altered.

An elderly man had a very acute and protracted attack of sciatica. Early in the course of the illness I found that the knee-jerk was lost. This was eight years ago, and when, about three years since, I last had an opportunity of examining the limb, there was no return of the reflex. The same thing occurred to a man, aged seventy-five. He had, during his attack of sciatica, herpes zoster femoralis, following the course of the internal saphenous nerve. The knee-jerk was never recovered until his death, which occurred four years later. A middle-aged man had a severe attack. The knee-jerk was lost, but in the course of two years it was gradually returning. A man, aged thirty, lost the knee-jerk on the affected side during an attack of sciatica. Having lost sight of him I cannot say whether or not it has returned. A woman, of middle age, recently under my care, suffered acutely from neuralgia and was laid up for five weeks. The pain affected the scalp and neck, but was most sharply felt in the regions of the lumbar and sacral plexuses and down the back of the left thigh. Pain was also felt in the opposite limb. The left patellar reflex was, and still is, completely lost, while, on the right side, only a slight tendon reaction can be elicited. I have witnessed the same thing in three other cases of sciatica, but it is unnecessary to refer to them in detail.

As the great ischiatic nerve has no part in supplying the rectus muscle it seems strange that such a symptom should

appear in sciatica. The explanation is, I should think, that other nerves, including the anterior crural, are involved in the neuritis as well as the great ischiatic, although pain is referred to the latter nerve only. I say neuritis, because whether or not there are any pathological changes in the nerve or its sheath in neuralgia, some lesion must, I should suppose, exist to account for the loss of a reflex. As to the pathology of simple neuralgia I venture to bring myself forward as a *corpus vile*. Suffering one day from sharp hemi-crania, I entered a church in which the organist was practising. So long as his foot was on one of the lower pedal notes my pain was completely relieved, but it returned the instant that the pedal was disused. This practical experience of a "lost chord" strongly suggested to my mind that in neuralgia there is something of an abnormal vibratory process going on in the nerve. Whether, in my case, a non-vibrating nerve was set in action by the vibrations communicated by the pedal note through the medium of the ear, or whether a too rapid series of vibrations was reduced by the incidence of slow undulations from the organ; on these points I would not hazard a guess.

DISEASES OF WOMEN AND CHILDREN.

A Case of Abnormal Twin Pregnancy.—Dr. R. C. McCullagh says in the *British Medical Journal*: On February 23, I attended Mrs. T., aged twenty-six, at her first confinement. She had been in labor eighteen hours; the liquor amnii had escaped some three or four hours before my arrival. I found the head presenting and jammed in the pelvis. Without further delay I delivered her with the forceps of a full-term living female child. When expressing the placenta a second foetus was simultaneously expelled, enveloped in its own membranes, which, along with its cord, were attached to the same placenta as the living child.

On examination it presented the appearance of a mummified female foetus, developed to about the fifth month. There was some torsion of the cord, which was looped round its neck in a figure of 8, both of which factors may have arrested the umbilical circulation.

Cases of "unequal development" in multiple pregnancy, being comparatively rare, I mention the case as it may interest readers.

Hydatidiform-Mole Pregnancy.—Engel (*Cantralbl f. Gynäk.*), has examined five cases of molar pregnancy which were observed in the course of 4,000 labor patients under his observation. These cases occurred in a woman aged twenty-two, a two-para; a second, aged twenty-six, a three-para; a third, aged twenty-eight, a four-para; a fourth, aged thirty-two, a nine-para; and a fifth, aged forty-six, who was the mother of no fewer than twenty children. The fœtus could not be found in any of these cases. The most characteristic symptom was hæmorrhage, which began about the third month and lasted for weeks or even months, in the course of which period the uterus steadily increased in size. At first the blood was very serous and almost colorless. Later old and recent clot came away. Another characteristic train of symptoms consisted in nausea, headaches, pallor, palpitations, and other phenomena, due to internal hæmorrhage. The uterine walls were always thin, the cervix participating in the morbid change. Hence sharp instruments are out of the question. Ergot should be given, the vagina carefully plugged, and ultimately the cervix must be cautiously dilated with compressed sponges, the uterus being emptied by the hand.

Mitral Stenosis in Children.—Dr. Octavius Sturges in a lecture (*Lancet*) spoke as follows: Mitral stenosis in children, then, which is almost always rheumatic, is not at first disabling. I doubt the wisdom of making patients of these young subjects solely for the reason that their hearts are thus changed. The need for early treatment will depend very much on the recurrence or not of rheumatic attacks, and the worst event to be feared in the course of them is pericardial adhesion. Children who keep free from such attacks will go on for a long time without heart trouble. Other children less fortunate will have frequent recurrence of what is really acute rheumatism, though of short duration, with only slight pyrexia and transient joint pains. With these latter the heart deterioration in the way of dilatation is apt to be very rapid, and is indicated by dyspnoea, palpitation, and presently œdema. And there are two physical signs which as these cases progress indicate what the end is to be. One, and the earlier, is the detection from time to time, with the successive rheumatic attacks of renewed pericardial friction; the other, and the later, which becomes the more obvious after the rubbing has

finally ceased, is rapid enlargement of the heart area, both across and lengthways. Of the origin of this change it does not become us to speak positively in the patient's lifetime. But we know for certain, and can show you in our museum, that the common cause is adherent pericardium.

SURGERY.

Fissura Ani.—In a paper, which recently appeared in the *Southern Medical Record*, Dr. Willis F. Westmoreland, says: I wish to speak now with reference to operations for fissure in ano. A great many physicians recommend the use of speculums for stretching the muscle; while other operators advise you to take a knife and nick the muscle before you stretch it. In olden times surgeons introduced their hands into the rectum, closed their fist and then pulled it out, stretch the muscle in that way. In the use of these different methods you cannot tell how far you stretch the muscle. I have never seen patients lose control of the sphincter as a result of this operation where the fingers or thumb had been used as a method of operation. Incontinence of the fæces occurs in those cases where the muscle has been cut, stretched with speculum, or where some of the old methods have been used. My plan is to put the patient under the influence of an anæsthetic. I stretch the sphincter; I feel the contracted parts of it have given way while my patient is under the influence of an anæsthetic; take my finger out, and then if there is not any contraction of the muscle—none at all—I let it alone. If the sphincter contracts, it shows that the contracted part is not thoroughly broken up, and I stretch it more while the patient is still under the influence of the anæsthetic.

Case of Choledochotomy.—Prof. E. Küster reports a case of gall obstruction and jaundice in a woman forty-eight years old. She had suffered for two years and had been already icteric for months. Küster, from the symptoms, diagnosticated presence of stone in the common duct. The operation showed this diagnosis to be true. He found the gall bladder shrunken, the common duct very much dilated and containing several stones. The common duct was incised and several calculi removed. The wound was closed by a double row of sutures and tamponed with iodoform gauze. With the exception of considerable secondary hæmorrhage the recovery was com-

plete. This is not the first case. Another case is reported by Kümmel; yet another by Courvoisier, in all five cases, so that we have six cases with one death and five recoveries. The application of this operation is entirely circumscribed. The cholecystenterotomy of Winiwarter will not be entirely replaced by this operation. Rehn, of Frankfort-on-Main, had a similar case to that reported by Küster, extirpated the gall bladder, after which he found several biliary calculi in the common duct, which he removed by incision. Sutures—recovery. Braun, of Könichberg, reported a case in which he, after separating the adhesions and fixed the shrunken gall bladder against the duodenum, discovered a large sized biliary calculus in the common duct, which by means of incision was removed. The wound was closed by four sutures, tamponed by iodoform gauze, and an uncomplicated recovery ensued. After seven days bile appeared in the intestinal canal.

Treatment of Abscess of the Liver.—Fontan (*Rev. de Chir.*) holds that a simple incision is not always sufficient, even when very large, to effect a cure of hepatic abscess. Scraping of the walls of the abscess was advocated as a desirable addition to incision. The scraping, it was stated, should be done with a blunt curette, guided by the index finger passed into the interior of the abscess. Two cases were reported in support of the author's opinion that such treatment is not likely to cause any serious hæmorrhage, and that it favors rapid and complete cure. In the discussion, Pozzi, whilst granting that the method might enable the surgeon to discover and open a second abscess, said this advantage would not compensate for such probable dangers as hæmorrhage and opening of the biliary passage. Monod considered the method not only dangerous, but also useless. He quoted cases to show that incision followed by drainage would suffice to bring about a cure of the abscess. In one of these cases, however, the ultimate result was not satisfactory. After three unsuccessful exploratory punctures, a fourth made in the seventh intercostal space revealed the presence of pus in the liver. Monod, after removing a portion of rib, made a free incision into the abscess and drained the cavity. The condition of the patient improved for a time; but subsequently the temperature rose, the diarrhœa became more profuse, and death took place six weeks after the operation. The original abscess,

which had been incised and drained, was found at the necropsy to be quite closed, but there remained two other collections—one near the convex surface, the other near the inferior surface of the liver. The presence of one or more other purulent deposits is usually the cause of failure of incision in the treatment of hepatic abscess. Unfortunately, Monod states, it is very difficult to determine the presence of such multiple abscesses.

Book Reviews.

A Text-Book of Nursing. For the use of Training Schools, Families, and Private Students. Compiled by CLARA S. WEEKS-SHAW. 12 mo. pp. 391. Second Edition, Revised and Enlarged, with Illustrations. [New York: D. Appleton & Co., 1892. St. Louis: J. L. Boland Book and Stationery Co. Price, \$1.75.

Some six years ago the first edition of this book was offered for the use of nurses and it sprang into immediate favor. The great advances made since that time have rendered a revision necessary and the result is the work before us. It is a thorough work and up to the times. Criticisms and suggestions have not only been requested, but the valuable hints thus acquired have been utilized and the result is a reliable, safe, and complete work which should be in the hands of every nurse pretending to have a thorough acquaintance with the principles of the profession she follows. We can safely recommend the book as a good and reliable guide to all those desirous of possessing such.

The International Medical Annual and Practitioners' Index for 1892. Edited by P. W. WILLIAMS, M. D., Secretary of Staff, assisted by a corps of thirty-two Collaborators—European and American—specialists in their several departments. 8vo. pp. 644. Illustrated. [New York: E. B. Treat, 1892. Price, \$2.75.

This work has become a standard reference work, giving a complete retrospect of the progress of medicine and therapeutics made during the past year, with frequent references to notices published in former numbers. The present volume which is the last one issued is much larger and contains much more than any previous one, yet the same price is maintained.

The improvement of the present issue over the former ones is marked and should secure a greatly increased sale for it. Being admirably arranged and indexed, it commends itself for the facility with which any subject can be looked up. The publishers are to be congratulated upon the handsome volume they have produced and we can confidently bespeak a large sale for it.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Surgery, Gynæcology, Pediatrics, Neurology, Dermatology, Laryngology, Ophthalmology, and Otology, by Professors and Lecturers in the Leading Medical Colleges of the United States, Great Britain, and Canada. Edited by JOHN M. KEATING, M. D., J. P. CROZER GRIFFITH, M. D., J. MITCHELL BRUCE, M. D., F. R. C. P., and DAVID W. FINLAY, M. D., F. R. C. P. 8vo. pp. 382. January, 1892. [Philadelphia: J. B. Lippincott Company, 1892.]

We have had occasion to review former numbers of this work and the standard laid down at the beginning has not only been adhered to, but has been improved upon. As a reflex of the best clinical teaching in Great Britain and America it stands pre-eminent. As a valuable, practical work of instruction each volume is unrivalled. *International Clinics* has become an institution; it is indispensable to the intelligent physician and it will in time become a valuable guide not only to those who contemplate teaching but to those intending to place their experience in the form of papers and articles. The great value of the lectures lies not alone in the instruction imparted, but in the manner in which this is done. We have here a reproduction of the teachings of men thoroughly conversant with their subjects and who are withal not only good and trained speakers but, in many instances, orators of no mean order, having an easy flow of elegant language.

The work has met with great success and we can safely advise all those of our readers, not already subscribers, to become such at their earliest opportunity.

An Obstetrician in Philadelphia stated some time ago that his business was to be "leading man at baby matinees."

Literary Notes.

The *Medical News*, of Cincinnati has discontinued publication owing to the death of Dr. J. Thacker who was its editor and publisher.

The *United States Official Postal Guide* has a monthly supplement published by Geo. F. Lasher, 1213 Filbert Street, Philadelphia. These monthly supplements will be furnished by the publisher at one cent per copy. The January Guide costs \$2.00.

The *Philadelphia Polyclinic* is one of the new fledglings. It is a bright, well-edited quarterly emanating from the Philadelphia Polyclinic and College for Graduates in Medicine a committee of the faculty acting as editors. It is published at the price of \$1.00 per year.

Gowers on the Nervous System, published by P. Blakiston, Son & Co., of Philadelphia, has just been translated in German, this being made from the second revision. Cohen, of Bonn, is the publisher. We understand that an Italian translation is nearly ready and will soon be upon the market.

Cullings from Garrod is the title of a little brochure recently issued by Dr. Enno Sander. As is well known Dr. Alfred Baring Garrod was one of the highest authorities on the subjects of gout and rheumatism, so that this pamphlet containing a résumé of his views on the pathology and treatment of these diseases will prove not only of interest but of practical value to physicians.

Lectures on Tumors from a surgical standpoint by Dr. John B. Hamilton is one of the most successful numbers of the *Physicians' Leisure Library*, published by Geo. S. Davis, of Detroit, at twenty-five cents per volume. Our readers will remember that not long since we had occasion to notice this little book. Its popularity was such that we have received a copy of the second edition. This is an improvement on the first, the author having corrected a number of small defects much to the improvement of the work as a whole. We expect to see a third edition very soon if past experience be any indication of what the future promises.

Books Received.—The following books have been received and will be reviewed in due course of time :

Transactions of the American Orthopedic Association. Fifth session held in Washington, D. C. September 22-25, '91, vol. IV, 8vo. pp. 403. [Philadelphia: Published by the Association. 1891.

Diseases of the Urinary Apparatus. Phlegmasic Affections. By John W. S. Gouley, M. D. 8vo. pp., 342. [New York: D. Appleton & Co., St. Louis, 1892. J. L. Boland Book and Stationery Co. Price \$1.50.

A System of Gynæcology with three hundred and fifty-nine illustrations; based upon a translation from the French of Samuel Pozzi. Revised by Curtis M. Beebe, M.D. 8vo pp. 604. [New York: S. B. Flint & Co. 1892.

Diseases of the Eye. A Hand Book of Ophthalmic Practice for Students and Practitioners. By G. E. De Schweinitz, M.D. 8vo. pp. 641, with two hundred and sixteen illustrations and two chromolithographic plates. [Philadelphia: W. B. Saunders, 1892. Price cloth, \$4.00, sheep, \$5.00.

The International Medical Annual and Practitioners Index for 1892. Edited by P. W. Williams, M. D., Secretary of Staff, assisted by a corps of thirty-two collaborators—European and American—specialists in their several departments. 8 vo., pp. 644. Illustrated. [New York: E. B. Treat. 1892. Price, \$2.75.

A Text Book on Nursing for the use of Training Schools, Families, and Private Students. Compiled by Clara Weeks-Shaw. Second Edition. Revised and Enlarged with Illustrations. 12mo. pp. 391. [New York: D. Appleton and Company. 1895. St. Louis: J. L. Boland Book and Stationery Co. Price, \$1.75.

International Clinics: A Quarterly of Clinical Lectures on Medicine, Surgery, Gynæcology, Pediatrics, Neurology, Dermatology, Laryngology, Ophthalmology and Otology, by Professors and Lecturers in the leading Medical Colleges of the United States, Great Britain and Canada. Edited by John M. Keating, M. D., J. P. Crozer Griffith, M. D., J. Mitchell Bruce, M. D., F. R. C. P., and David W. Finlay, M. D., F. R. C. P. Jan. 1892, 8 vo. pp. 382. [Philadelphia: J. B. Lippincott Company, 1892.

The uses of Water in Modern Medicine. By Simon Baruch, M. D.. Vol. I. The Physician's Leisure Library. 12mo. pp. 115. [Detroit: George S. Davis, 1892. Price, 25 cents.

Lectures on Tumors from a Clinical Standpoint. By John B. Hamilton, M. D., LL. D. For the Use of Students. The Physician's Leisure Library. Second Edition. 12mo. pp. 150. [Detroit: Geo. S. Davis, 1892. Price, 25 cents.

Society Proceedings.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

March Meeting, the President, Dr. Wm. E. Moseley in the chair.

Dr. L. E. Neale read a report of two cases of sarcoma of the ovary.

Dr. J. Whitridge Williams read a "Resume of Döderlein's work on vaginal secretion."

In view of the great interest which attaches to the question of puerperal sepsis in general, and the autoinfection in particular, I thought that it might be interesting to give a brief resume of an important work, on the vaginal secretion, which has just been published by Döderlein of Leipzig.

The object of his work was to find what constituted the normal vaginal secretion and its relationship to puerperal troubles.

He states that to find the normal type of vaginal secretion, we must go to very young virgins, who are unaffected by any disease; and if we find a similar secretion in older women, and especially in pregnant women, we would be justified in considering it the normal vaginal secretion, and anything that differed from it, pathological.

Accordingly, he found the normal vaginal secretion to be a small quantity of whitish, crumbling material of the consistency and appearance of curdled milk; it contains no mucus, and its reaction to litmus paper is always intensely acid.

The pathological secretion, on the other hand, is of a yellowish or greenish yellow color and cream-like consistency, and often contains gas bubbles or particles of mucus; its reaction is weakly acid or neutral and sometimes alkaline. Un-

der the microscope, the normal secretion is found to consist entirely of vaginal epithelial cells and a large quantity of large bacilli; while the pathological secretion consists of epithelial cells, many pus cells, a mixture of all kinds of micro-organisms.

In all, he examined the secretions of 195 pregnant woman, and of them 55.3 per cent. had normal and 44.6 per cent. pathological secretions.

As primiparæ have generally been less exposed to infection of all varieties, it would appear a priori that more of them in comparison with multiparæ would have normal secretions, and this was found to be the case; for the secretions of 65.7 per cent. of primiparæ and only 38.6 per cent. of multiparæ were found to be normal. Naturally, in private practice the proportion of normal to pathological secretions would be far more favorable.

The point of greatest interest in his work is that he found this bacillus constantly in the normal secretions, and not in the pathological ones. The bacillus does not grow upon the usual culture media, but one can be readily cultivated upon sugar bouillon and sugar agar. It was found to produce an acid, which he considers lactic acid, with great rapidity, and it is to it, that the normal acidity of the vaginal secretion is due. The products of the life of the bacillus appear to be fatal to the growth of most of the pathogenic organisms, as he showed by experiments. Thus, he could introduce large quantities of pus producing organisms into the vagina and in four days find that they had completely disappeared. It was shown by experiment that the bacilli were not pathogenic, and therefore that it could play no part in the production of sepsis.

Accordingly, in more than one-half of all cases there could be no possible danger from sepsis, unless it was introduced from without, and even then, unless very large amounts were introduced, they would be rendered innocuous by this acid producing bacillus.

The pathological secretion possess marked pathogenic properties, as was proved by inoculating eighteen rabbits with it, in all of which suppuration was produced and in some instances, death. This secretion contains all sorts of micro-organisms, and in eight out of eighty-seven cases, streptococci were found.

As the streptococcus is usually the cause of puerperal fever, and as the other pus organisms have not as yet been shown to play any part in its production, we may conclude that even the pathological secretion is only dangerous in about ten per cent. of the cases, and that in about ninety per cent. of all women, whether the secretions be normal or pathological, there is absolutely no danger of autoinfection; in these cases, therefore, there can be justification for internal disinfection.

Döderlein does not consider that the streptococci are able of themselves to invade the uterus and produce infection, and accordingly believes that the only way which they could gain access to the uterus, even if they were present in the vagina, is by being carried there by manipulations of one sort or another. Consequently he considers that any examination whatever in these cases increases the danger of infection, and it is most likely, that under these circumstances vaginal injections do more harm than good.

In the light of these observations, the examination of the vaginal secretions is made a part of the routine practice at the lying-in hospitals at Leipzig, before students are allowed to examine the cases. If the secretions be normal, they are allowed to examine them; but not if they be pathological.

In the cases in which the secretion was pathological, he sought by various means to bring it once more to the normal consistency during the pregnancy; and of all the means which he employed, found that injections of a one per cent. solution of lactic acid gave the most satisfactory results. For it apparently offered an unfavorable medium for the growth of the vaginal bacilli, which in turn may be vaginal secretion unfit for the growth of most organisms. In numerous cases, under its use, he saw the other organisms give place to the normal vaginal bacilli, and the pathological to the normal secretion.

WILLIAM S. GARDNER, M. D., Sec'y.

PETTIS COUNTY MEDICAL SOCIETY.

SEDALIA, Mo., March 21, 1892.

Stated Meeting, Pettis County Medical Society; the President, Dr. G. H. Scott, in the chair. Number of members present eleven. Minutes read and adopted:

The President reported several cases he had treated which he regarded as mixed disease of scarlet fever and diphtheria.

Dr. E. C. Evans reported a case in his practice which present most all the symptoms of scarlet fever and measles.

Dr. E. M. Collins read a paper entitled "Puerperal Infection."

The subject of the paper being the clinical history and treatment of one case. Young married woman age twenty-four; has one child two and a half years old; became pregnant in November 1891, and aborted in January 1892.

Before cleaning out cavity of uterus the temperature was 104° F., pulse 130. At 10 P. M. same day, temperature 99 $\frac{2}{10}$ ° F., pulse 100.

Dr. E. F. Yancey said the doctor should not have delayed thorough cleansing of uterus until his second visit.

Dr. I. T. Bronson thought such cases well treated from time of abortion would have no infection. Explained why some women who have no treatment and are not infected, while others under similar conditions are infected by difference in constitution.

Dr. W. H. Evans regarded the case reported as one of septicæmia. Explained why some women were infected and others not by difference in power of resistance. In all such cases we should find out what is in the uterus.

Dr. E. C. Evans said prompt and thorough action was required in these cases.

Dr. E. Mohel thought infection was produced by unclean instruments or admission of air.

Dr. R. L. Shadbume said to empty the womb was the *sine qua non* in these cases. Thought air was not necessary for infection. Had seen cases where no instrument or finger was used and no air admitted. Still there was infection.

Dr. G. H. Scott said to have putrefaction there must be air. Did not think the blood was antiseptic.

Dr. Collins in closing the discussion said there could be no decomposition without heat, moisture, oxygen, and bacteria.

Society adjourned by motion.

GEO. E. McNEIL,

Secretary.

Melange.

The American Electro-Therapeutic Association will hold its second annual meeting in New York, Oct. 4-6, 1892, at the New York Academy of Medicine, located on West Forty-Third Street.

Gratitude.—A physician in this vicinity, says the *Boston Med. and Surg. Jour.*, was recently called to a family which he found in such destitute circumstances that he gave in addition to his prescription, a five dollar bill. Happening in the next day, he discovered that his gift had thus been spent; three dollars to the priest, and two dollars to get another doctor.

The Association of Military Surgeons of the National Guard of the United States held its second annual meeting at Memorial Hall, St. Louis, April 19, 20 and 21, last. The meeting was a success in every respect. The attendance was large, the meetings well attended, the papers and demonstrations excellent, and the entertainments all that could be desired. Among the features of the meeting were : A clinic at the City Hospital ; an exhibition of the field appliances and work of the Medical Department, U. S. Army a detachment of U. S. Hospital Corps from Fort Riley, Kans., being on hand. Among the entertainments there were a reception and ball at the Merchant's Exchange Hall, receptions by Dr. A. C. Bernays and others, a carriage drive in and about the city with a collation at the Jockey Club House. The visiting surgeons expressed themselves as delighted with the success of the meeting as well as with the treatment received by them at the hands of citizens and profession.

The following officers were elected for the ensuing year: General Nicholas Senn, of Chicago, President; Major Henry, of New York, First Vice-President; Lieutenant Colonel Woodward, of Michigan, Second Vice-President; Lieutenant Colonel E. Chancellor, of St. Louis, Secretary; Lieutenant Ralph Chandler, of Milwaukee, Corresponding Secretary; Colonel Francis J. Crane, of Denver, Treasurer.

The Chairman then announced the Executive Committee

for the ensuing year as follows: General J. D. Bryant, of New York; General J. D. Griffith, of Missouri; Lieutenant Colonel H. S. Burrell, Major C. F. W. Meyers, of New Jersey; and Major Lawrence C. Carr, of Ohio.

Washington City, and May 1893, coincident with the meeting of the American Medical Association in the "City of Magnificent Distances," were selected as the time and place for the third annual convention.

Pan-American Medical Congress.—The following are the special regulations for the first congress:

1. **TIME AND PLACE OF MEETING**—The first Pan-American Congress shall be held in the City of Washington, D. C., September 5, 6, 7, 8, A. D. 1893.

2. **REGISTRATION**—The Registration fee shall be \$10.00 for members residing in the United States, but no fee shall be charged foreign members. Each registered member shall receive a card of membership and be furnished a set of the transactions.

3. **ABSTRACTS, PAPERS, AND DISCUSSIONS**—Contributors are required to forward abstracts of their papers, not to exceed six hundred words each, to be in the hands of the Secretary-General not later than the tenth of July, 1893. These abstracts shall be translated into English, French, Spanish and Portuguese, and shall be published in advance of the meeting for the convenience of the Congress, and no paper shall be placed upon the programme which has not been thus presented by abstract. Papers and discussions will be printed in the language in which they may be presented. All papers read in the Sections shall be surrendered to the Secretaries of the Sections; all addresses read in the General Session shall be surrendered to the Secretary-General as soon as read; and all discussions shall be at once reduced to writing by the participants.

4. **INCORPORATION**—The Chairman of the Committee on Organization shall cause the Congress to be incorporated under the laws of Ohio, and fifteen trustees shall be elected in accordance therewith, who by by-laws and through the Executive Committee shall supervise all receipts and disbursements by the Treasurer in accordance with the laws of Ohio. The President, Secretary General, Treasurer, the members of the

International Executive Committee for the United States, and Chairmen of Sections shall be ex-officio members of the Board of Trustees.

5. FOREIGN NOMINATIONS—All nominations by the International Executive Committee must be in the hands of the Chairman of the Committee on Organization by June 1, 1892, and in default thereof the Committee on Organization shall elect officers for Countries thus delinquent.

6. THE ORGANIZATION OF SECTIONS—The officers of each section shall consist of—Honorary Chairmen, who shall be residents of the constituent countries of the Congress, one Executive Chairman, who shall organize the work of the Section, direct its deliberations and deliver an inaugural address at its opening session, one English-speaking Secretary and one Spanish-speaking Secretary, residents of the United States, who shall co-operate with the Executive Chairman in conducting the correspondence of the Section; and there shall be one Secretary for each Section, resident in each additional constituent country of the Congress.

7. DOMESTIC AUXILIARY COMMITTEE—The Auxiliary Committee for the United States shall be elected by the Committee on Organization and shall consist of one member for each local medical society, or, in the absence of medical organization, then one in each considerable center of population, which Auxiliary Committee shall Co-operate with the Committee on Organization and with the General officers in promoting the welfare of the Congress. Nominations for the Auxiliary Committee on Organization, each for his own State, except that in the failure of any member to make such nominations by January 1, 1892, or in the inadequacy of the same, the Chairman of the Committee on Organization shall supply the deficiency.

8. EXECUTIVE COMMITTEE—The Board of Trustees shall designate seven members, including the President, Treasurer Secretary General, and members of the International Executive Committee for the United States, who shall comprise an Executive Committee which shall transact all business of the Congress *ad interim* in accordance with the by-laws adopted by the Board of Trustees.

9. AMENDMENTS—Amendments to these regulations can be made only by the International Executive Committee on a

majority vote, ten members constituting a quorum, at any meeting of the Congress.

Pursuant to the laws of Ohio and these Regulations adopted as above, and in accordance with nominations by the Committee on Permanent Organization, the Incorporators elected fifteen trustees.

Local Medical Matters.

Dr. W. N. Brennan has been confirmed as Health Commissioner of St. Louis and has entered upon the performance of the duties of his office.

The Marion-Sims College of Medicine held its second annual commencement exercises on April 25 last. The event occurred at Memorial Hall, diplomas being conferred upon eighty graduates. Two medals for proficiency were also presented to the successful candidates.

The Caledonia, Dr. S. H. McIntyre's private hospital has been remarkably fortunate as an institution of this character. But one death has occurred within its walls since its opening, and this despite the fact that a large number of operations have been performed. It certainly speaks well for its management.

Assistants at St. Louis Hospitals.—The results of the examinations of applicants for the position of assistants at the Female and City Hospitals have been announced. The following appointments were made:

Assistants at the City Hospital—Harvey S. Crossen, St. Louis Medical College; Wm. S. Deutsch, Missouri Medical College; Owen A. Smith, St. Louis Medical College; Ben Shanklin, Marion Sims College; Rudolph Schaefer, St. Louis Medical College; Gustav B. Schultz, Beaumont College; Sebastian Joseph, Beaumont College, and Max Goldstein, Missouri Medical College. **First Assistant at the City Hospital**, Dr. David Nowlan; **senior assistants at the City Hospital**, Dr. H. H. Born and Dr. John P. Stack.

Assistants at the Female Hospital—Drs. Otto L. Von der Au and John Kinsworthy of Beaumont College, Arthur H. Bradley of Marion Sims College, and Wm. W. Duke of the College of Physicians and Surgeons.

THE ST. LOUIS Medical and Surgical Journal.

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Original Contributions.

TWENTY-FOUR CASES OF TUBERCULAR PHTHISIS TREATED WITH TUBERCULIN-KOCHII. By E. F. BIEWEND, M. D., St. Louis.

Having had personal instruction and observation of the use of Tuberculin in Berlin from my uncle, Geheimrath Robert Koch, I may be permitted to publish the following experiences in its use. In view of the fact that there has been so much discussion pro and con by those who had little or no practical experience in its use I simply desire to submit the results obtained in a number of clinical cases, without comment, leaving the reader to form his own conclusions.

CASE I.—Male, aged twenty-five years; occupation, tobacco wrapper; height five feet, nine inches; weight, 104 pounds; general appearance, very much emaciated. Patient was sick one year, having had a severe hæmorrhage. Both lungs were affected, dullness on percussion over posterior region. Cough was very bad; expectoration profuse. Patient had night sweats and diarrhœa, and no appetite. Sputum contained bacilli (No. 12 Gaffky). Temperature 9 A. M., 96° increasing during the day to 102 $\frac{2}{3}$ ° at 6 P. M. Disease not hereditary.

Treatment was commenced on February 14, 1891. The first injection consisted of one milligram of a two per cent. solution. After the fifth injection patient got sick at the stomach, vomited, and was feverish (102°). I, therefore, omitted injections for several days, but prescribed phenacetine and quinine alternately. On the 26th day of March I injected

three milligrams. Three hours after that patient got very sick, vomited, his temperature rose to 103° , and two days after a rash appeared all over his body, causing intense itching. I, therefore, omitted the injections for fourteen days. At that time I received a letter from Prof. Koch, advising me to reduce the dose. I did so and commenced with one-tenth of a milligram of a one-tenth of one per cent. solution and never increased the dose, if the temperature rose above 100° . Gradually I increased the dose, and now the patient receives every week one injection of six centigrams of a one per cent. solution. He weighs at present 119 pounds, an increase of fifteen pounds. His cough has disappeared entirely, he has no night sweats, his bowels are regular, his appetite is very good. Bacilli are not entirely absent, but very few; occasionally there are none to be found. Patient has returned to his work, and has never missed a day for over eight months. He is employed at Drummond's Tobacco Factory, St. Louis, Mo. Up to date he has had 113 injections.

CASE II.—Male, aged forty-nine years; occupation, retired physician; height, five feet six inches; weight, 107 pounds; general appearance, stoop-shouldered, cachectic, sallow complexion. Patient was sick about two and one-half years, had five or six severe hæmorrhages, the upper lobe of the left and the whole of the right lung was involved. His cough was dry and hard, his expectoration little, but of yellowish appearance. He had night sweats and occasionally his bowels were out of order, but he used medicines of his own "to keep control of his stomach," as he used to say. His appetite especially at dinner was fair. His sputum contained bacilli (No. 9 Gaffky). His temperature (from 9 A. M., to 9 P. M.), averaged from 99° to 100° . The disease was hereditary, for his mother and brother had died of consumption.

On February 18, 1891, I gave him the first injection, consisting of one milligram of the two per cent. solution. Three hours after the patient got sick at stomach, felt very chilly, and could eat no supper, but felt better the next morning, although not so well as before the injection. On the third day after the injection he felt very much better; his respiration was more free and easy, his temperature 100° . On the fourth day I injected again one milligram, this time with no bad results. On March 3, I injected four milligrams; five hours after the

patient became very sick, but recovered more rapidly than the first time. His temperature was $100\frac{1}{2}^{\circ}$. The next morning his courage had failed, and he thought of giving up the treatment; but as he commenced to feel better, he resolved to continue it yet for a while. For two months I never increased the dose over three milligrams.

The patient improved in every way; he gained strength, his appetite and his sleep was very good, he had no more night sweats, and his cough was not at all troublesome. He, therefore, returned to his home, some sixty miles from this city, on May 5, 1891, returning for treatment every week. From that day up to February 13, 1892, I gave him once a week an injection of from three to six centigrams of the one per cent. solution. The weather and the roads being so bad, the patient thought it prudent to remain at home, till the winter is over. His present weight is 114 pounds, an increase of seven pounds. He received in all sixty-seven injections.

CASE III.—Male, aged thirty-three years; occupation, fireman of the City Fire Department; height, five feet eight inches; weight, 130 pounds. General appearance: thin, drawn face, wasted form. The apex of the left lung was affected, while the right lung was free. The patient had been sick for about one year. He coughed very little during the day, but all night, and he expectorated profusely. He had no night sweats; his bowels were constipated; he had no appetite. His sputum contained bacilli (No. 2 Gaffky). His temperature at 9 A. M. was 97° , at 5 P. M. 101° . The disease was not hereditary.

On February 19, 1891, I injected the first dose, consisting of one milligram of the one-tenth of one per cent. solution, which was not followed by any rise of temperature. I therefore increased the dose to three milligrams. When I examined the sputum, I found bacilli (No. 5 Gaffky). On March 18 I injected ten milligrams, but there was no rise of temperature, nor reaction of any kind. The patient increased in weight, on the average one pound in a week. His general appearance improved; his face assumed a healthy complexion, his eyes were bright and clear; his appetite was very good. On April 1 I injected two centigrams of the one per cent. solution, and again there was no reaction, and in the sputum no bacilli were to be found. His weight on that day was $144\frac{1}{2}$, an increase of $14\frac{1}{2}$ pounds. After that date the patient re-

ceived every fifth day an injection of from four to six centigrams of the one per cent. solution until April 24, 1891, when his cough had disappeared entirely, his expiration was thirty-two inches, his inspiration thirty-six and one-half inches, his temperature was normal, and there were no bacilli in his sputum.

I, therefore, discharged the patient as cured, he having received in all but twenty-two injections. Since then he brought me, from time to time, his sputum for microscopical examination, but up to present date I have found no bacilli in it. The patient is, to all appearances, a perfectly well man.

CASE IV.—Male, aged thirty-five years; occupation, cigar maker; height, five feet, eight inches; weight, 147 pounds; general appearance, fair. The apex of his right lung was affected, but he had had no hæmorrhage. He had been sick for about eight months. There was a constant hacking cough, but little expectoration. The disease was not hereditary. patient had no night sweats, nor diarrhœa, but his appetite was poor. His temperature at 9 A. M. was 99°, at 3 P. M. 100½°, at 7 P. M. 101½°. In his sputum there were bacilli (No. 1 Gaffky).

On March 16, 1891, I injected the first dose; one milligram of the one-tenth of one per cent. solution; but no change in feeling, nor rise of temperature set in. I gave the patient an injection every day, and increased the dose to three milligrams, until on March 25, I injected six milligrams at 11:30 A. M. At 7 P. M. the temperature of the patient rose to 103°, he felt a smothering sensation, and diarrhœa set in. His sputum showed bacilli (No. 6 Gaffky). I omitted injections until April 3, when I injected 6½ milligrams. There were no bad effects, although the temperature rose to 99°, and there was a slight night sweat. The patient's appetite becoming fair, I gradually increased the dose without any bad effects. The temperature became normal, his expiration was thirty, his inspiration thirty-four inches. On April 15, I found no more bacilli in his sputum. He felt quite well, had a very good appetite, and no cough, nor night sweats, nor diarrhœa. I now injected every third day a dose from two to five centigrams of the one per cent. solution until May 22, but there was no reaction, no rise of temperature. On May 24, I could discharge the patient as cured, for he had regained perfect

health and weighed more than ever before. His weight being 178 pounds, he had gained thirty-one pounds in ten weeks, having received in all twenty-three injections.

CASE V.—Female, aged twenty-nine years; occupation, office cleaner (Missouri Pacific Railroad), height, five feet, five inches; weight, 122 pounds; general appearance, sallow complexion, sunken eyes, anæmic. The upper lobes of both lungs were affected, and there was a cavity in the right lung. She had had no hæmorrhage, but her sputum was occasionally streaked with blood; her cough was persistent, and her expectoration was profuse. She had night sweats, her bowels were constipated, and she had no appetite. Her temperature ranged from 101° at 7 A. M. to 104° at 7 P. M. Her sputum contained bacilli (No. 12 Gaffky): The disease was of two years standing and was hereditary, her mother and her brother having died of consumption.

I prescribed antipyrine and quinine alternately and cold baths, to reduce the temperature, and gave maltin cum yerba santa. I did not wish to treat this patient with tuberculin, but she insisted upon it. On March 21, her temperature was 99° at noon; I, therefore, injected one-tenth of a milligram of the one-tenth of one per cent. solution. In this case I could not regulate the treatment by the fever curve, as the patient refused to take medicine; so I gradually increased the dose to one milligram of the one-tenth of one per cent. solution. After six weeks' treatment, when the dose had reached three milligrams of the one-tenth of one per cent. solution; the patient felt so much better and stronger that she came to my office for further treatment. I now gave her two injections a week, gradually increasing the dose to four centigrams of the one per cent. solution. Her temperature gradually became normal and remained so. I found bacilli in her sputum until the middle of September, when it was free from bacilli. The patient improved steadily; her voice was clear, her appetite was very good, her bowels and menstruation were regular, her cough disappeared, and her weight on September 22, was 132 pounds, an increase of ten pounds. Since December 1, I gave her every week only one injection of from four to six centigrams of the one per cent. solution. At present she is as well as ever. There are no more bacilli to be found in her sputum. She weighs now 135 pounds, an increase of thirteen pounds, after receiving ninety-

two injections. She resides at No. 1426 N. 7th Street, St. Louis, Mo.

CASE VI.—Male, aged thirty-six years; occupation, saloon-keeper; height, five feet, ten inches; weight, 190 pounds, general appearance, fair, very pale complexion, slightly stoop-shouldered. The patient had been sick for about two years, having had several light hæmorrhages. The upper lobe of his right lung was affected. In the evening, during the night, and in the early morning his cough was very troublesome. His expectoration was profuse, his sputum sometimes streaked with blood. He had night sweats, his bowels were constipated. His sputum contained bacilli (No. 2 Gaffky). His temperature ranged between $98\frac{1}{2}^{\circ}$ to 99° . The disease was not hereditary, but the patient's wife had died of consumption two years before.

On March 20, I gave him the first injection, half a milligram of the one-tenth of one per cent. solution, but no reaction followed. I injected the patient every other day, gradually increasing the dose to one centigram of the one per cent. solution. This patient improved remarkably, his cough disappeared, his appetite was very good, and he gained five pounds in weight after three weeks' treatment. His temperature always remained normal. But the demon Rum had a firm hold on the patient, who on this account suffered a great deal from gastritis, and came very irregularly to be treated. The sputum sometimes being free from bacilli, I gradually increased the dose to eight centigrams of the one per cent. solution; but no reaction set in, and the temperature remained normal. Having injected the patient on December 14, 1891, I did not see him again till January 4, 1892, when he came to my office, asking me to prescribe for him, as he had had light hæmorrhages again. He was intoxicated, and I had to tell him that I could do nothing for him, and have not seen him since. He had received in all sixty-seven injections.

CASE VII.—Male, aged thirty-six years; occupation, ice, wood and coal dealer; height, six feet, one inch; weight, 170 pounds; general appearance, gawky, lanky, cadaverous, pale-faced. The patient had been sick for about eighteen months. There was a cavity in the right upper lobe, and the apex of the left lung was affected. He had never had any hæmorrhage, but he frequently spit blood. There was much cough with

profuse expectoration. His appetite, however was fair, and his bowels were regular. His sputum contained bacilli (No. 8 Gaffky). The average of his temperature was 100° . He had no night sweats. His disease was hereditary.

On March 22, 1891, I gave him the first injection, consisting of one milligram of the one-tenth of one per cent. solution, and eight hours after that he felt a chilly sensation which lasted about an hour. I gave him an injection every third day, increasing the doses, till May 4, 1891. They caused no reaction and no bad feeling; his temperature was always from $98\frac{1}{2}^{\circ}$ to 99° . Gradually his weight increased, his cough disappeared, his appetite became very good, and he slept well at night. Bacilli were always found in his sputum till July; after that time only occasionally.

After May 4, I injected the patient twice a week, the dose rising from four to seven centigrams of the one per cent. solution, but no reaction nor rise of temperature followed. He weighs at present 196 pounds, an increase of twenty-six pounds. This patient had taken excellent care of himself; he was discharged as cured on August 30, 1891. Occasionally examining his sputum microscopically, I have never found bacilli again in it. He keeps well and attends to his usual occupation, delivering coal and ice personally. In all he had received forty-eight injections. He resides No. 1015 South Seventh street, St. Louis, Mo.

CASE VIII.—Male, aged twenty-nine years; occupation, horse-collar maker; height, five feet, seven inches; weight, 106 pounds; general appearance, thin, emaciated, sallow complexion. The apex of his left lung was affected, and his right lung was largely infiltrated. His cough was persistent, his expectoration profuse and streaked with blood. (The patient had lost his parents in his infancy; the cause of their death was not known to him). He had profuse night sweats: his bowels were irregular, but he had no diarrhoea; his appetite was fair. His sputum contained bacilli (No. 8 Gaffky). He had been sick for about two years. His temperature from March 21 to March 24 ranged from 97° in the forenoon to $100\frac{1}{2}^{\circ}$ in the afternoon.

On March 24, when his temperature was 99° I gave him the first injection, consisting of one-half milligram of the one-tenth of one per cent. solution. I injected him every other

day, gradually increasing the dose until May 4, 1891, when the dose was one centigram of the one per cent. solution. By this time the patient had improved very rapidly; the injections caused no reactions, nor any other disturbances; his appetite became every good; he slept very well; his night sweats ceased altogether, and he gained five pounds in weight. Until May 25, I, therefore, gave him only two injections a week, the doses ranging from three to five centigrams of the one per cent. solution. At times no bacilli whatever were to be found in his sputum. On or about the 25th of May the patient, who had not been able to work for eighteen months, went to his work again. He now received but one injection per week until July 13, when he ceased to come to my office. As far as I know, he is still at work and doing well. His weight on July 13 was 116 pounds, an increase of ten pounds, after having received thirty-seven injections.

CASE IX.—Male, aged thirty years; occupation teamster; height, six feet two inches; weight, 132 pounds. General appearance, a living skelton. His left lung was entirely gone, and there was very little left of his right lung. Having examined the patient, I absolutely refused to treat him with tuberculin; but three days after he returned in company with his mother, and both of them entreating me to give him at least a few trial injections. I at last consented. His temperature ranged from 95° to $103\frac{3}{4}^{\circ}$. On April 10, 1891, at 1 P. M., when his temperature was $99\frac{1}{2}^{\circ}$, I gave him an injection of one-tenth of a milligram of the one-tenth of one per cent. solution. When I visited him again on April 12, he said that he felt much better, but there was no change in his temperature. I gave him another injection, increasing the dose to two-tenths of a milligram of the one-tenth of one per cent. solution. Two days after, I injected three-tenths of a milligram of the one-tenth of one per cent. solution, and when I visited him again on the 17th of April, I found him in a collapsed condition. His temperature had risen to 105° and had fallen to 95° , I then told his relatives that I would not treat him any more, and left the patient, telling him that he would probably feel better in a few days, and that, if he did, I would see him again. About three weeks after, he called again at my office and requested me to continue the treatment, insisting upon it that it did him good. I told him that the treatment would

not do him any good as long as his temperature was so high, and bade him examine and note the state of his temperature three times a day for a week. He did not return to my office to give his report, for he died but a few days after. He had received only three injections.

CASE X.—Female, aged twenty-eight years; was married and had given birth to a child which died in infancy; height, five feet two inches; weight, 100 pounds. General appearance, emaciated, weak, nervous. The patient had been sick for about fifteen months; her disease was not hereditary. She had a large cavity in the right lung. There was constantly a deep hollow cough, accompanied by profuse expectoration. Her bowels were constipated, and her night sweats were profuse. She had no appetite, was very restless, and had no sleep at night. Her sputum contained bacilli (No. 14 Gaffky), and her temperature ranged from $101\frac{1}{2}^{\circ}$ at 8 A. M., to $104\frac{2}{3}^{\circ}$ at 8 P. M.

I commenced to treat this patient (under protest) on April 13, giving her the two injections per week till July 3, 1891, the dose ranging from one-tenth of a milligram of the one-tenth solution to one centigram of the one per cent. solution. But there was no change in her temperature and no improvement whatever. As the patient was perceptibly failing, I induced her husband to take her to the German Lutheran Hospital, where she died July 27. She had received twenty-eight injections, and refused absolutely to take any kind of internal medicine.

CASE XI.—Male, aged nineteen years; occupation, clerk; height, five feet, nine inches; weight, 156 pounds. The patient was suffering from a slight attack of la-grippe, but as his mother had died of consumption a year before, his family physician, Dr. W. M. Bowler, of St. Louis, advised injections of tuberculin to make the diagnosis certain. The patient's temperature from April 11, to April 14, 1891, ranged from $98\frac{1}{2}^{\circ}$ to $98\frac{3}{4}^{\circ}$. The first injection on April 14, consisting of three milligrams of the one-tenth of one per cent. solution, caused no rise in temperature, nor any other reaction. On April 18, I injected six milligrams of the one-tenth of one per cent. solution, but again there was no reaction. On April 22, I increased the dose again, giving him one centigram of the one per cent. solution, but no reaction followed. Finally, on

April 27, I injected four centigrams of the one per cent. solution, and again there was no rise in temperature, nor any other disturbance. The patient's appetite was good; there was no cough, no sneezing, nor any other symptom of la-grippe. The sputum was always free from bacilli. The patient, who resides, No. 1104 S. Fourth street, St. Louis, has been in good health up to date.

(Concluded in next number).

1223 St. Ange avenue.

IMPETIGO, THE EPIDERMAL ABSCESS CAUSED BY PUS-COCCI.

A paper read before the Aertzliche Verein of Hamburg, Germany, by Dr. P. G. UNNA, January 12, 1892. Reported especially for the ST. LOUIS MEDICAL AND SURGICAL JOURNAL.*

(Continued.)

But, gentlemen, we must take the elder Hebra not by his words but by his deeds; and there can be no doubt that, through the dogma of his abnormally constructed "metastatic pustules" and *Impetigo herpetiformis*, contributed to the founding of the doctrine of the primarily purulent vesicular diseases of the skin. His polemic however, was sufficient to cause the majority of the writers of text books on skin diseases, even up to very recently to avoid mentioning Impetigo as an individual disease, or where it was mentioned and its chief characteristics described, to tuck it away among the eczemata. Thus Bohn teaches that Impetigo originates only in pustules, and that the eruption is sudden in its nature (i. e. without prodromata, the German word being "*sofort aufschiesst*" or, literally, "shoots out at once," Translator), but on the other hand he declares that its appurtenance to Eczema is "completely assumed." More than this, he divides it into *Impetigo sparsa*, and *Impetigo figurata* thus following old Willan and furnishing direct proof that he was not any more assured in his own mind than was Erasmus Wilson in his time, as to the basic differences existing between Willan's "pydraceous, impetigo pustules, appearing on an eczematous surface," and his own Impetigo.

And thus it came to pass that it was left to Bokhart, in the year 1887, in a memoire, short but pregnant with facts, to

* Translated by Dr. Oscar Treutler, St. Louis.

prove, by experimental inoculation made upon himself and which cannot be overthrown by the *ipse-dixit* of anybody, "that there is an independent pustular disease, caused by the white and yellow staphylococcus (*staphylococcus pyogenes albus et citreus*), which is differentiated from Eczema and other pustular diseases (*Impetigo herpetiformis*, etc.), by a chain of specific symptoms entirely its own."*

After Koch, in 1881, had set the postulates for the study of all infectious diseases, and had illustrated them by exemplars; after Ogston, and especially, Rosenbach, three years later, had cleared up the etiology of pus formation in a multitude of cases; after Garré in his impetigo investigations, in 1885, had, by inoculation of pus cocci upon his own person, proven the origin of furuncles, it was a simple matter for any observing dermatologist, acquainted with the methods of modern pathology, to prove for himself the existence of an independent purulent skin disease, originating from pyogenic cocci.

Bokhart, however, did more than this; while he helped an old and well-known disease into its proper ætiological and pathological place, and that too, despite the veto of still mighty dermatological authorities, he connected with it two diseases which still stood in an isolated position and were just as little understood, viz: Furunculosis and coccogenous syphilis. The clinical relations long recognized between these three skin affections were thus at one coup most satisfactorily explained, and ætiological light for the first time since the days of the transference of Favus and Scabies, illumined the field of dermatology and threw its searching beams into the most distant corners of our science. I need only to remind you of Zoster and Variola, of Scabies and Acne, of the syphilides and tuberculosis of the skin, with their purulent formations, and finally of the pus-like secretions of a certain, formerly so-called "impetiginous" eczema, to show to you what a number of weighty questions at once arose in the study of all inflammatory dermatoses, and how it became necessary for us at once to revise our opinions of them collectively and individually, from the single stand-point of positively determined, specific suppurations. The consideration of these questions,

*BOKHART, *Ueber die Aetiologie und Therapie der Impetigo, des Furunkels und der Syphilis*. Monatshefte für praktische Dermatologie, 1887, page 150.

and of those of the mixed infections of the skin in general, has not rested among thinking dermatologists since the time of Bokhart's work.

The coming historian of the battles now being waged for freedom from the many lingering assumptions of infallibility of the dogmas of the school of Hebra, must record as the first success the "Sytem" of Auspitz, (which receives an echo in the Text-book of the younger Hebra), and as the second the epoch-making work of Bokhart.

Unfortunately the gain in knowledge, which should have been consequent upon the better understanding of the purely infectious purulent diseases of the skin, has up to the present been but slight. The cause of this fact is not due to, if I may judge by myself, to any lack of love for labor or inability to understand the methods of investigation on the part of dermatologists, but mainly to the fact that the sure ground of experimental pathology on which Bokhart stood, is not the clinical ground with which we are so familiar. Just as the inoculation of a pure culture differs from the accidental infection which results in a furuncle or an impetigo in everyday life, so, necessarily, if experimental research is to bear good fruit, the records of the experiment must progress hand in hand with investigation and comparison of the details of the clinic. We had first to ascertain the exact relations of the ordinary impetiginous toward other purulent and puriform products and to establish exact clinical and histological criteria for them before we could even think of undertaking a profitable study of the role of suppuration in other dermatoses. And right here, in my case at least, lay the difficulties of the situation.

The greater part of the apparently pure, small, red and inflamed suppurating pustules that I had had the opportunity of examining, from time to time within recent years, and which originated on persons, otherwise healthy, but who were subject to furunculosis, sycosis, or acne pustulata, and those which I had observed on cadavers, had yielded the most varying (and therefore certainly not typical) histological results, though pus cocci could be obtained from many of them. The reason for this was, manifestly, that I made too free with the diagnosis of Impetigo. Small intensely yellow crusts, soaked with serum, can easily be mistaken for purulent efflorescences. Similarly, all kinds of punctiform necroses of the epithelium

and underlying cutis, such as we so frequently see in cadavers (especially of children), and, we may add, true impetigines that had been treated with antiseptics or escharotics, have a normal appearance, but histologically correspond to nothing less than to the experimental pustules.

Only within the last year have I been enabled to rise superior to my earlier condition of doubt by being unexpectedly placed in possession of a very large supply of Impetigo material, obtained from three cadavers, one of which was of an adult, and the other two of children. In these cases there occurred (possibly as the result of the wet-pack or of sponging), along with a manifest furunculosis, extensive eruptions of pus-vesicles of every calibre, which not only corresponded in every particular, microscopically, to the experimental pustula, but every one of which was found to be a nest of staphylococci. The histological examination showed congruent conditions throughout, so that nothing was now easier than to establish therefrom the type of Impetigo.

Since then, in my daily practice, I have succeeded in differentiating, with absolute certainty, the Impetigo of Bokhart from the many efflorescences which simulate the same in a greater or less degree, and in predetermining the result of the bacteriological and histological examination.

The following is the clinical picture drawn from these experiences of mine, and wherever it differs from Bokhart (as it does somewhat in the minor details) the difference is due to the diversity of the objects under examination (in my case, for instance, accidental pustules are described, while Bokhart describes experimental pustules):

Size.—The size of pustules varies within wide limits, and therefore a typical size does not exist. The smallest represent a barely discernible yellow point, glimmering through the horny layer, while the largest Impetigenes attain a diameter of from two to three centimeters. We can say, however, that the majority of them range in size from that of a pepper seed to that of a lentil.

Shape.—The pustules have generally a rounded shape, but only the smallest of them are regularly circular. The larger are generally oval or bean-shaped and their margins are marked by minute scallops. In the beginning they appear as superficial acuminate projections, looking exactly as though

one had shoved up the horny layer from below with a blunt needle, the horny layer sinking back to the level of the skin without bulging at the sides. With enlargement the picture changes completely, and as soon as the pustule attains the diameter of a millimeter the pustule assumes the uniquely characteristic shape of a drop of fluid lying upon the surface of the skin. The pustule now grows in height without increasing its superficial area, becoming more and more abrupt in elevation, until it reaches an altitude of from one-half to three-quarters its longest diameter. Having attained these dimensions, unless ruptured (for they never burst or spontaneously empty their contents) they remain in *statu quo* until desiccation takes place. When under peculiarly favorable circumstances (to them), the pustules enlarge in superficial area, they also increase in height in a proportionate manner, so that vesicles of two centimeters (0.8 inch) in diameter will have an altitude of one centimeter (0.4 inch). While, therefore, there is no criterion as to diametric measurement of the individual pustules, we find that there is a direct ratio between their area and their altitude, a fact due apparently to the uniform elasticity of the horny layer, which controls the shape and cubical contents of the pustule. This also accounts for the fact that we find the highest and most voluminous Impetigenes on the tenderest skins only, those of children for instance, and conversely, on skins with a heavy, thick horny layer (as that of the palm of the hand) the vesicles are small and lacking in altitude.

Color.—In the beginning the color is a clear light sulphur yellow. After a time it changes to greenish yellow, which is the color of the pus in the older abscesses. It is from the very beginning opaque—so much so that in producing a picture, in colors, of a case of Impetigo we must use body colors with considerable covering power. Occasionally, it is true, individual pustules become to a certain extent translucent and their contents appear turbid, especially immediately beneath the pustular envelop. Such pustules have a wax-yellow color and a semi-transparent appearance which simulates very closely a lot of drops of melted wax adherent to the skin. These appearances are due to secondary changes, and are indicative of the cessation of pus formation in the interior of the cell and, that serous exudation is taking place.

External surface.—The external surface of the pustule is at first smooth and resembles a very flat canvas or tent roof, but slightly stretched. With its subsequent rapid increment in altitude the covering becomes globularly arched and more tense. Firm pressure upon the apex may depress the pustule, but as soon as released it regains its elastic tension and shape. After the pustule has attained its limit of growth and has remained *in statu* for several days, the envelop begins to wrinkle from the effects of loss of water from the cell contents, the top becomes flattened and even depressed in spots, while the sides still retain their abrupt steepness; but the *Impetigo pustule never becomes pitted or umbilicated*. It lacks, as shown by histological examination, all the elements necessary to the production of the phenomenon of pitting.*

The Envelope—The envelope of Impetigo pustules is there, and examination of it, after removal, shows it to be pure corneal matter, which from its previous tension has a tendency to roll up. No portion of the subjacent skin layer is ever attached to it, and to the naked eye presents no sign of alteration.

Pustular Contents.—The contents of the pustule is a drop of pure ordinary pus, except where, later on, a serous exudation escapes into the pustule, when we have sedimentation, with the formation of a layer of turbid matter resting upon a lower creamy one. *The pustule is always sunilocular.*

Floor of the Pustule.—The floor of the pustule, after the evacuation of its contents is white with a yellowish or greyish tinge. Very gentle friction can be made over it without the production of hæmorrhage, the papillary bodies being obviously flattened and leveled out.

The Surroundings.—The inactivity of the immediate surroundings of the pustule is one of its most characteristic features. In many cases even the ruddy halo indicative of inflammation is entirely absent, and where it is present the zone is narrow, weakly marked and irregularly injected. Occasionally the marginal reddening is mottled, so that one could easily imagine that he was observing extensions of some of the larger vessels. Under no circumstances however, is a considerable zone of dilated capillaries a necessary feature of the Impetigo

* PITTING.—The German word here used is *Dellenbildung*, which signifies the formation of depressions like those made by pressure in cedema.

pustule. Any of the graver inflammatory symptoms, oedema, a densely infiltrated base—all point with unerring certainty to complications (dermatites, eczemata) or indicate pustules of a different character.

Course of the Pustule.—The course of the pustule is always a distinguishing one. It grows rapidly and subsides slowly. So rapid is the process of growth (from six to eight hours) that we are nearly always confronted by fully developed impetigines, which have already reached culmination. Of course, we always find in the neighborhood of these completed pustules quantities of younger ones which are in the process of growth. For many days, in case no treatment is given, we see them standing apparently unchanged, except that the great majority of them deepen in color to a greenish yellow, a few become transparent (as stated above), and here and there an individual pustule collapses. Then desiccation begins; for a short time the little abscess shows dimly and greenly through the faint white apex of the envelope, until the latter by desiccation becomes a brownish, opaque, horny mass which finally hides the pustular contents. While this is progressing the contents are being pushed upwards by the processes of repair, and they too become dry, and uniting with the dry envelope and a few layers of the pustular floor to form a thick crust, which is but loosely attached to the skin and falls off very easily.

Simple, uncomplicated impetigines never leave scars. The complete dessication of the individual pustule requires from two to fourteen days according to extraneous circumstances (treatment, situation, amount of primary moisture, complications, etc.). The complete duration of the disease is even less subject to computation. Inasmuch as the formation of new pustules is dependent upon inoculation from without, the duration of the disease and the degree of dissemination over the body depends entirely upon the mode of, and frequency of opportunity for infection. They are always scattered, frequently so widely separated, indeed, that we must explain their colonization by transportation of the infection from a common starting point by the aid of the finger nails, etc. Their even distribution over the trunk is explained by attrition (of clothing) etc., and by the method of dressing the abscesses. Plasters, ointments, bandages, poultices (mushy

applications) afford the very best vehicles of transportation, and account for the thickly clustering colonies so frequently observed. The scratch of the finger-nail may under certain circumstances produce a linear development of the pustules, much in the same way (but on a large scale) that the platinum wire acts in agar culture. Scratching may also cause sudden eruptions, like acute exanthemata, which may easily be attributed to internal causes, metastases, etc., like the "metastatic pustules" of Hebra, which were probably, in the greater number of instances at least, true impetigines. The usual cause of Impetigo however is chronic, long-drawn out by repeated inoculations.

Particular Locations.—Particular locations cause a slight deviation from the foregoing observations. Thus impetigines of the face, and especially in infancy, usually have a more reddened and broader areola and run a more rapid course, than they do elsewhere on the person.

In the thick beard and axillary hairs the pustules are nearly all of the same size, corresponding to the dilated hair bulbs. Pustules in these localities are also, always acuminate, being elevated tent fashion, by the hairs that pierce them.*

On the palm of the hand and the sole of the foot impetigines are exceedingly rare, and when they do occur are greenish-yellow, but slightly elevated, and in cases where they are neglected frequently cause extensive undermining of the mid-horny layer.

Upon the scalp and on the nape of the neck impetigines occur quite as frequently as other cutaneous affections of these regions and for which, indeed, they are very frequently mistaken. In these localities they are frequently ruptured by the comb or brush in dressing the hair, but they do not agglutinate the hair to the same extent as Eczema and other diseases whose exudate is of a fibrinous nature. The majority of crusts, therefore, that mat, and as it were, felt up the hair so strongly, are not those of impetigines, or at least not those of uncomplicated Impetigo. For this reason alone it would appear to be advisable in the future to be more careful in the use of the word "impetiginous" in the designation of moist affections of the scalp. The substitution of "impetiginous"

*But these should be differentiated from sycosis of these hairs, even though they be the precursors of the same.

for "crustaceous" in describing skin diseases of this region is as unnecessary as it is misleading and harm-producing. The yellow color of the crust should never be accepted as indicative of the presence of pus, and only in those cases, where upon removal of the crust a furuncle presents itself and pure pus is formed should we suspect Impetigo as the origin of the crust. When such is the case a further search will probably lead to the discovery of genuine yellow or yellowish green impetiginous in the immediate neighborhood.

[Concluded in the MEDICAL AND SURGICAL JOURNAL for July.]

INTERESTING POINTS IN MEDICAL JURISPRUDENCE. HENRY A. RILEY, A. B., LL.B., New York.

One Limitation to Expert Evidence.—In a recent Massachusetts case the theory of the defence was that death could not be caused in a certain way and offered expert evidence to prove this statement. The prosecution in rebuttal presented witnesses who had actually performed the act though without the result of death, and the court said in considering this condition of affairs: "But where the testimony to be met is the opinion of expert witnesses that it is impossible in the nature of things to be done, it is not necessary to rely on expert opinions to the contrary, if it can be shown as a matter of fact that the thing has been done."

If, for example, expert evidence were to testify that it would be impossible to propel a vessel by steam across the Atlantic Ocean or to navigate the air with balloons or flying-machines, or to propel cars by electricity, or to communicate with other persons at a long distance away by telegraph, or by spoken words, to store up sounds in a machine or instrument so that long afterward they could be reproduced or to render one temporarily insensible to pain by anæsthetics, it would not be necessary in reply to call other experts to give opinions to the contrary. The direct facts might be testified to by any person who knew them. * * * In *Reeve vs. Dennett*, 145, Mass. 23, the plaintiff's evidence tended to show that a certain compound was worthless for the purpose of allaying pain in filling teeth, and it was held competent to meet this evidence by calling witnesses to testify that operations upon their own teeth when this compound was used were practically painless. In the trial of Palmer evidence tending

to show that strychnine could not be discovered in a body after death was met without objection by evidence that it had been done and the experiments were stated.

Life Insurance and Laudanum.—In a late case in Indiana the contention was in regard to a life insurance policy, the condition of which was that the policy was to be void if the insured die by his own hand.

The insured took an overdose of laudanum and died, and the court held that the condition did not apply if the taking was accidental nor if he intentionally took the overdose but at the time was of unsound mind and incapable of judging the moral consequences of the act. The condition in a policy of life insurance that it will be void if the insured shall die by his own hand, has no application where the insured kills himself by accident.

Is Tobacco a Drink?—The *Albany Law Journal* has the following readable paragraphs: "In a recent Vermont case a verdict was set aside because one of the parties treated some of the jurors to cigars. There was some discussion whether they constituted 'victual or drink.' Taft J. who evidently does not eat or drink cigars observed. 'Tobacco is both a victual and a drink. It is taken as a nourishment, sustenance, food, etc., therefore a victual. It is not an absolute use of the word to call it drink. Joaquin Miller says: 'I drink the winds as drinking wine.' If a man can drink wind, I think he can drink tobacco smoke, vile and disgusting as it is. A man is compelled to drink it by having it puffed in his face on all occasions and in all places, from the cradle to the grave. It is a drink.'" By virtue of the possession of the Century Dictionary we can furnish his honor some more direct authorities than the wild and worthless Miller.

"I did not as you barren gallants do
Fill my discourses up drinking tobacco."

Chapman, *All Fools*, II, 1.

"By this air the most divine tobacco that ever I drink."

B. Johnson, *Every Man in two Humour*, III, 2.

Thou canst not live on this side of the world, feed well and drink tobacco. G. Wilkink's *Miseries of Inforced Marriage*.

"Furiosus can not eat a bit, but he must drink tobacco so as to drive it down." Davies' *Scourge of Folly*, Epig. 148.

So we have drinking-tobacco as well as chewing-tobacco. As to drinking the wind, the poet Shelley speaks of the star-charioteers as "drinking the wind of their own speed."

Railroad Companies not Responsible if Agent has Small-Pox.—Everyone who has a possible claim to damages against a railroad company or big corporation is pretty sure to push it in the courts with great energy.

One of the extreme cases of the kind occurred recently in Kansas where a person bought a ticket for a railroad from an agent who was suffering from small-pox. The buyer contracted the disease and afterwards brought suit against the railroad company for gross negligence. It could not be shown, however, that the company nor any of its superior officers had any knowledge that the ticket agent had the disease, and the complaint was dismissed.

The Civil Damage Law and Medical Attendance.—A case has recently been tried in New York under the Civil Damage law where a person brought suit for injuries suffered by his apprentice.

The agreement specified that the plaintiff would furnish board, clothing, medical attendance, etc., etc., and receive in return the services of the apprentice.

The latter frequented a saloon and becoming intoxicated was frozen and unable to work for two months.

The plaintiff supplied medical attendance, etc., and brought suit under the Civil Damage law against the owner of the building in which the saloon was. The court decided adversely however, and held that the plaintiff was not injured in his property so as to make the owner liable but that any claim was to be settled between the plaintiff and his apprentice.

Taking an Oath With the Left Hand.—A brave French officer, now on the retired list who lost his right arm in the Franco-Prussian war, appeared as a witness before court in a city in the south of France a few weeks ago. When called upon to swear that he would tell the truth in the customary manner the officer naturally raised his left hand. The counsel for the defendant objected to the witness at once on the grounds that "an oath taken with the left hand was worthless." The learned judges were unable to decide the question and withdrew to an ante-room for consultation. In a few

minutes the solons reappeared and the president read the following decision from a literary and patriotic point of view worthy of a Monsieur Prudhomme: "In consideration of the fact that when the glorious remnants of our army appear in our courts to respond to their legal duties we can not demand that they take oath with those limbs which they have lost in the service of their country, we decide that the oath just made with the left hand of the witness is admissible."

An Insurance Policy Payable to Children.—A policy of the New York Life Insurance Company for \$5,000 on the life of a married woman was made payable to her children. She paid two quarterly dues of \$39.60 each and then died, not having at that time any children. The company refused to pay the policy on the ground that there were no legal beneficiaries and suit was brought by her administrator, on the theory that the amount reverted to her estate. The court held that there was no money due under the policy except to her children and as none had ever been born the policy must fall. It was suggested but not asserted that if there was any claim against the company it must be brought in an equity action and only for the two premiums paid.

THE COUNTRY PRACTITIONER. By DR. CHEVES BEVILL, Winfield, Ark.

It is very often remarked by city physicians, that the "country doctor amounts to but little." Though, I am proud to know that while some make this broad assertion, that there are hundreds of able men in the profession in our large cities who know better. There is one thing, that seems to be the rule among many physicians, who have had every advantage to be qualified to do their work, and that is, they class all country doctors together. Just because three-fourths of them are behind the advance guard, that is no reason that the one-fourth should be. I have been a country practitioner for fifteen years, and over. Hence I from an unbiased stand point, say what I do, and for convenience I shall divide the country physicians into three classes; beginning with the worst first, and hope by this to give those who may perchance read this, a better knowledge of the physicians under consideration.

First, we have here the typical old Arkansaw doctors, who were here before there was any law governing the practice of medicine; long enough to have to register as a physician in regular practice for five years, prior to 1881.

And, right here, I will say, that throughout this State, many came in who ought to be at something else.

Many of them came in who never studied anatomy or physiology one day in their lives. All they know, so far as book knowledge is concerned, is what Gunn, King or Thomson says. They have done a good deal of practice, and thereby have grown up simply as practitioners. And still hold their hold upon many people.

I know of men who belong to this class, who have not bought a standard medical work within the last twenty years, and so far as medical journals are concerned, they never read one, unless a "sample copy" happens to find them. I have heard them say, "that they were of no use." "That they preferred the old way." This class of men have no knowledge of the pathology of any disease whatever.

They practice obstetrics without any work on that subject, and without the remotest idea of antiseptics. Their finger nails look as if there might be a *pliocene* deposit under them. I have been called in consultation when there was a difficult case of labor, and to see their movements made me feel disgusted.

One case of hip presentation; fourth day of labor. He had the woman, with a common chair, turned down in front, the woman's head down on the floor; her feet upon the chair, and he trying to get the fœtus turned by shaking the woman; all that was necessary was to bring the breech of the child in line with the pelvis, and it was all over.

I have known them in cases of postpartum hæmorrhage, to skin the bark off an apple tree upward and make a tea, or give them bark horn tea, or some other prank that belongs to the dark ages; I have heard them say, "that they had rather let both mother and child go together than to perform craniotomy," or "kill the child and take it," is their expression. This shows that their hands are to prove to-day, what they should, provided they knew anything about operative midwifery.

Their surgery is, of course, very rude. This class of men

have their friends and patients, who hang to them, thinking that they are the doctors. Some years ago I went to see an old man, suffering with renal calculi. One of these old fogie fellows was there. He asked me, "what I thought was wrong with him." After awhile I told him what seemed to be the trouble with him, telling him that it meant the passage of small calculi or gravel. Yes, said he, "he has passed two from the kidneys as large as this," picking up a pebble about three-fourths of an inch in length, and fully one-half in diameter. This is a jaw breaker to me.

Well, furthermore, these men never carry either a clinical thermometer, or hypodermic syringe, and half of them cannot count the pulse correctly to save their lives.

As to the drugs they employ; it is a shame to know that they do have to be classed as physicians, along with the more enlightened ones. I have at the same drug store that I buy drugs, seen them buy old-fashioned saddle bags full of patent medicines, carry them home with the air of a lord, dispense them out in small quantities to poor suffering women especially. Some of these doctors are so abominably ignorant, that they blow some of the preparations that women use, as vaginal suppositories, saying, "that the drug cuts off ulcers from the neck, and inside of the womb, as large as chicken gizzards every time they use the medicine."

These men would not know the uterus of a woman if they were to find it, and its adnexa, in a jar. Good Lord, help such.

Of course, they use quinine, calomel, lobelia, opium and some tincture iron muriate.

I must leave this stratum of men, who compose the cretacean formation of medical science, and rise a step higher, and it is a great pity, that it has to be called "a step," it should be several, yet I can only give the one. (But before I leave this point of the subject which refers to the doctors, who never engaged in practice for five years, prior to 1881, I do not mean, that there were not good physicians in the country, who had either read medicine systematically, or are graduates of reputable colleges.)

Secondly. We have, then, a class who were licensed to practice medicine, perhaps, only, or as "physician and surgeon." The sympathies of the Board were too great toward

many of them when they were examined. For instance, among them you would find a man that, when asked as to what a dose of morphine was, would say "from ten to fifteen grains." Or, as to the treatment of meningitis, he said "he would bleed the patient." "What vein would you open?" "The *temporal arter*." And many such. Some of these men would be sent home, admonished "to read up and come again." Some of them lived in country places, and perhaps they would come next time with a petition from every man and widow woman in their settlement, asking the Board to "grant the doctor liberty to practice medicine and charge for it." While there were others who did very well when examined. Among these, and many others who have been permitted to take up the practice since, we find men who do a good deal of work. Yet, they read but little. Some of them have been practicing for six or seven years, and have perhaps bought one or two works on practice, and not a single work on therapeutics, obstetrics or surgery. And perhaps they are subscribers for as high as *two monthly medical journals*, costing them one dollar each. Some of these doctors continue to use medical works that are, by far, too old to follow at this rapid age. They are, or seem to be, satisfied with almost anything that is called a medical work. Some of them, a few years since, subscribed for a so-called "Family Practice of Medicine," paying \$8.00 for the book, which was like throwing the money away. A considerable number of them bank heavily on "Thompson's Medical Adviser." Many of these men, as the preceding class, use neither thermometer nor hypodermic syringe. They go ahead and do practice, as if they were up with the times, so far as they are concerned. They do nothing, comparatively speaking, in surgery. They leave this for others. And to show their ignorance of gunshot wounds, some few years ago I was called eighteen miles away to see a man who had been shot from ambush with a 44-cal. Winchester rifle. The ball entered the body on his left side, breaking the ninth rib, passing out between the tenth and eleventh on the opposite side. Four physicians had examined him, and never found the place of entrance. His wife, looking at his dress coat, found out how he was hit. Of course, these men think but very little about such cases. The patient may get well; if so, all right; if he dies, they say that he would have died

with all the doctors in the country. Strange to say, many of this class of doctors prescribe patent medicines—especially female regulators of different names—regardless of the condition of the patient.

These men, as the preceding class, employ no antiseptic precaution in obstetrics. Some of them have quite a number of cases of puerperal septicæmia, with some deaths, and others crippled for life. This is a shame on the profession and a shame on the poor patient. I have tried to convince them that there is a safe plan, yet they do as they do just because "dad" did. Some few, who ought to be put in this division, have a vaginal speculum, which he uses once in awhile, without a sound. It is well for the poor women that they have no sounds.

It is amusing to hear some of them talk about "fixing up medicine to cut a cataract off the eye-ball," not knowing the nature of such.

Well, I have said enough on this division. I will step a few rounds higher, and get to the—

Third grade upward. Here we find an extensive field, with a vast amount of much needed work. "The laborers are few." Here we find a *few men* with whom we can talk on medical subjects with some degree of satisfaction. While some are not in possession of as much literature as they would like to have, still what they have they study and are always ready to receive anything new with an open mind. Hence, we find better libraries and more medical journals. But a medical library in the country, or country town, is a treat to one who knows the worth of the same.

Out of about thirty physicians in this country there are but two of us who love works on medical and clinical diagnosis and, but the same with works upon pathology, while dermatology is left out. I have Fox's Atlas, last edition and Taylor's valuable Atlas, which are the only ones for miles. Well, it is plain to be seen that all of the difficult work falls into the hands of a very few. All major surgical and many minor operations come under their care. Antiseptics are employed, by this small number to their great satisfaction, and the benefit of their patients. Here are the men who work in gynecology, surgery, obstetrics, dermatology, ophthalmology, laryngology, neurology and all the other ologies that come along.

Still, there are some of them who report any of their cases

to a journal. If men do not begin in their early practice to write, they are not apt to later on. We ought to be willing to let the profession at large see what blunders we make in the backwoods. Never be ashamed to let known just how you are situated.

Well, there is still a drawback with some of the men of where we are now, i. e. the need of taking one, if not two good weekly medical journals. I am anxious to see the *Medical Record* and *Weekly Medical Review* come, as if I were a politician and were taking a daily during a heated contest. The physician is engaged in a hot contest every day and it is imperatively necessary that he keep up. Take one or two weeklies and five or six leading monthlies, one in each department of medicine, and by this we keep right along with the best minds in the profession.

Well, after all this we find that the charlatan who never reads anything can go along and gather up what we ought to have. "Honesty is the best policy," and it holds good in medicine. I had rather not get practice than to have to promise that I can cure anything, and at the same time know better.

From what has gone before it will be seen that the main work depends on a few physicians. They have to attend to cases of every variety, with no specialist to send their difficult cases to. And owing to the great depression in money circles we are left out, so far as our pay goes, with many of our patients. So it is plainly to be seen that from what I have here written, that the country physician's life is anything but a desirable one. Furthermore, and worst of all for us, or those of us who have always been too poor to go to college, and graduate is that our day of grace is passed. The three year course has been adopted and we are not able to go so long. We are denied the privilege of membership in any and all of the scientific societies of the profession. I may be wrong in my view of the matter, yet I believe that qualification can be reached in a shorter period than three years. It seems hard to think a man may practice medicine in all of its branches for ten or fifteen years, and if he can go to college that he must go for three long terms, away from his family, before he can get a diploma, while a young man whose father has money plenty to send him for the required time, can graduate in the same class with him. The *Medical Record* in an editorial last

year asked the question, "should poor men study medicine?"

In one way this is right, for who can go so long unless he is rich. On the other hand it is hard for men who would amount to something provided they had a chance, to have to do worse.

While we are not condemning the course that has been adopted by the colleges to raise the standard of medicine, we only have to say that it works a hardship on all of us who are poor.

As to what is to be the future of this matter, we can not tell of course.

Though we will continue to profit by the knowledge we gather from good medical journals and from our clinical observations enough to feel free and grateful to our superiors in medicine, and I for one am under many obligations to the kind editors of first-class journals, that what little I have from time to time written for them has been given to an intelligent profession whom I am glad to be numbered with, whether I am allowed to belong to any of the grand societies or not, so I leave the foregone remarks to them for their consideration.

April 15, 1892.

GALL-STONES AND SOME OF THEIR CONSEQUENCES.* By S. K. CRAWFORD, M. D., Sedalia, Mo.

The etiology of the affection under consideration is exceedingly obscure, and, possibly, for that reason may prove the more interesting to the student-physician.

The genesis of a disease will always remain of deep interest until increased knowledge discovers the physical basis of its expression. This represents true progress in medicine. Modern chemistry has more fully defined for us the basis of gall-stones; we know pretty nearly their component parts: but chemistry has not revealed to us why biliary calculi are formed in certain biliary states and not in others; we may assume that the bile-constituents in certain instances exist in undue proportions and hence, become abnormal in their relation to each other.

Authors have left us in doubt as to the status of bile from which gall-stones are formed; whether it is normal or abnormal in its composition. Niemeyer says:

* Read before the Pettis County Medical Society, April 4, 1892.

“It is probable that the bile from which gall-stones, rich in cholesterine are formed, has only a slight solvent power over cholesterine; and as it has been found that both cholesterin biliary coloring matter with lime ash dissolved by tauro-cholic acid and tauro-cholate of soda, it was very natural to consider a lack of tauro-cholic acid in the bile, or a decomposition of the tauro-cholic acid in the gall-bladder, as the *possible* cause of gall-stones.”

It is also “thought that excess of chalk in the bile, from drinking lime-water has something to do with the formation of gall-stones.” But we know that chalk is not thus formed. But this fact is equally true in many instances wherein biliary concretions are not formed and thus the genesis of gall-stones is left unsolved, a fact merely stated at this point of our progress. For the sake of refreshing our memories I will state that the average amount of bile secreted by a man during twenty-four hours is fifty-six ounces. By taking the average of six analyses, it appears that of this quantity, 862.8 parts are water and 137.1 parts are solid residue, which is composed of biliary acids in combination with alkali, fat, cholesterine, mucus, coloring matter and various salts.

The chief component parts of gall-stones are two substances: cholesterine and coloring matter; the former in proportion of eighty-eight to ninety-four per cent, but their proportions do not always correspond; also animal matter and bile salts, and sometimes a small trace of iron. Biliary calculi are found in the hepatic duct, in the gall-bladder, and ductus communis in the intestines, and rarely in the stomach, but their principal seat is in the gall-bladder. With regard to their physical structure, biliary calculi have been divided into crystallized, deposited, amorphous, and porcupine-like calculi these phrases simply indicating the form or structure of the concretions, and their number is various, ranging from one to several hundred. If one be found it assumes the shape of the cavity in which it is formed, and if many be present they not only vary greatly in size, but are marked by the facets corresponding with the impression each makes upon the other, resulting in polyhedral forms, having smooth edges, blunted corners, and generally smooth surfaces, which may be either concave or convex. Their specific gravity is low. Their color varies from whitish to yellow, dark brown to greenish-

black. In many cases of biliary calculi, no perceptible change can be seen in the coats of the gall-bladder, but sometimes catarrhal inflammation, attended with ulceration of the gall-bladder, results in perforation of that organ.

Gall-stones occur from infancy throughout adult life, but most frequently between the ages of twenty-five and sixty years, and women are more frequently attacked than men. The formation of gall-stones is painless, but so soon as one or more of them attempt to pass either of the ducts, symptoms arise which are among the most torturous of sufferings, until the cause escapes free into the duodenum;—this is gall-stone colic.

The symptoms of gall-stone colic are numerous and may be divided into special and accidental ones. Inflammation, jaundice, and suppuration are illustrations of the latter. The list of special symptoms is much larger and embraces a great variety of symptomology. The fact is that small calculi pass into the bowel without any pain at all, but in the great majority of cases the passage of calculi is most agonizing.

Attacks of gall-stone colic sometimes begin with slight pain and uneasiness, which may last an hour or two, then a sudden increase of pain is felt in the epigastrium, attended with chills and shivering, which are soon followed by vomiting. At first the food is thrown up, then mucus, with more or less bile, but pain is the most uniform and constant symptom. The pain is usually felt first in the region of the liver and stomach, then throughout the right side of the chest, frequently extending to the clavicles, the right side of the abdomen being involved in pain and tenderness. The patient describes his pain as burning, twisting and cutting. Constipation and flatulence are usual accompaniments of this disease. These attacks may last from two to three hours to several days, and subside only on the passage of the calculi, leaving tenderness in the region of the liver, over the stomach, and right half of the abdomen. These attacks are repeated as often as biliary calculi become engaged in transit through the ducts into the duodenum, and even then may become impacted along the course of the bowel, resulting in inflammation and ulceration of the bowel, peritonitis, and death.

It should be understood that subjects of gall-stones unusually susceptible to reflex excitation, may present almost

every manifestation of which the nervous system is capable.

The diagnosis of gall-stones may be, and usually is, attended with differential complications, such as chronic catarrh of the ducts, and carcinoma of the stomach and upper bowel, being among the more frequent impediments to clear and immediate recognition of the disease. But there are less frequent complications that yet stand in the way of unmis-taken diagnosis, namely acute intestinal colic, renal colic, lead colic, aneurisms of the hepatic arteries, of the aorta, and in some cases stenosis of the pylorus, and cholecystic colic itself, is one of the most difficult cases to either negative or affirm. It will be remembered that jaundice is not always present in gall-stone cases. The physical examination of the liver, gall-bladder and ducts is of the greatest importance in the proper inspection of the case. Inspection gives us the absence or presence of fulness in epigastrium, in right hypochondrium, in upper part of abdomen, we note the condition of the inter-costal spaces on right side as to variations in fullness, state of the stomach before and after vomiting, matter vomited, color, composition and odor of the same; whether paroxysmal pains of great severity accompany vomiting, and whether these come more frequently at night or after eating; whether fresh or decomposed blood be vomited. Palpation and temperature over region of liver, noting resistance as compared with the left side, also noting resistance of right and left rectus muscle are of importance. Also the influence of standing or recumbent posture.

Is the liver thick, thin, hard or soft, or irregular to touch? Is its surface smooth or nodulated? Is it free or does it give the sense of adhesion to parietes? Can the outline of the gall-bladder be found? What are its physical characters? Does it fluctuate all over or partially? Where? Why!

Percussion: extent of dullness, whether in line of nipple, or line of axilla.

Resonance over liver, general or local.

In some of my own cases I have found great emaciation, cough, ulceration of the throat, and muco-purulent, expectoration, accompanied with profound icterus. These cases got well. In two fatal cases, post-mortem revealed extensive ulceration of the duodenum, also of different portions of the small intestines, accompanied with hæmorrhage, recurring at irregu-

lar intervals. In these cases the gall-stones were so large they could not pass the ducts.

TREATMENT.

First : Under this head, the first head is for immediate relative relief. Second, expulsion of gall-stones. Third, prevention of their formation.

Morphine and chloroform have proved the more efficient remedies in my hands in affording the relief first demanded. Belladonna was never satisfactory. A hot flannel saturated with chloroform bound over the epigastrium and right side extending well round toward the back, always gave relative relief.

I have found the hot immersion bath afforded relief in cases where general spasms were imminent, together with bromide of potash and bromide of ammonia, in twenty to thirty grain doses, administered alternately with morphine and chloroform. In cases of acid vomiting so distressing, I have found great benefit from the administration of syrup of orange-peel, oil of cloves, and carbonate of soda, given in half-pint draughts of warm water. So far as expulsive medicines are concerned I reserve discreet doubts as to their efficacy. But in all cases where the hepatic region is not too tender gentle compression and rubbing may come under the head of aids in this direction. I have frequently given large doses of sweet oil with twenty to thirty drops of chloroform, hoping that they might thus act and have faith that they did aid in the expulsion of the gall-stones.

As a prescription I have used with signal benefit in every case the following :

R Chloroform.
Sulphuric ether.....℥ss.
Glycerine.....℥ij.
Syrup buckthorn.....℥ij.
Syrup orange-peel.....℥j.

M.

Sig. A teaspoonful every morning and night for two or three months, and then later a teaspoonful at bed time every second or third night.

In eight cases treated thus the disease never returned.

THE NATURE AND USES OF CHLORO-PHENIQUE. By R. M. KERLEY, M. D., Superintendent St. Louis Female Hospital.

Antiseptics seem to have become the indispensable adjuncts of the practice of medicine and surgery in modern times. The limitations of the uses to which these therapeutic agents can be put have not yet been defined, for the reason that as pathology becomes better understood the application of antiseptics become more extensive and varied. A problem, however, which has presented itself to our consideration in connection with antiseptic preparations and one which, to my mind, is of the highest importance, is that of obtaining an agent which is both efficient in its action and not noxious in its consequences and after effects. In other words, a preparation that is both reliable and harmless; one that will accomplish the end desired and not entail any untoward or baneful effects.

In looking about for such an agent I have been chiefly influenced by the desire of obtaining a preparation which would act as a disinfectant, a microbicide, and at the same time un-irritating and not easily absorbed by mucous membranes. These are conditions that cannot be easily filled, it is true, nevertheless, it occurred to me that the problem was one not impossible of being solved, and after diligent search for such, my labors were rewarded by obtaining an agent which filled these conditions and provided satisfactory results.

The success of the action of a remedy in certain conditions depends, of course, in a proper application of the same in a rational manner. The best remedies ever devised will fail if improperly applied, and for this reason it is that I presuppose a rational application of the therapeutic agent of which I propose to write. I will not burden my readers with a recital of cases, nor with a long dissertation upon the bio-chemistry of the product, intending merely to lay down some broad truths concerning its good actions in certain general conditions.

First, a few words in regard to its composition, its name—Chloro-Phenique—being almost comprehensive of this. It is composed essentially of phenic acid, chlorine gas, and water. It has the property of liberating the chlorine in a nascent state; and, as is well known, all gases that are liberated in this condition have a much more powerful action than in any other state. If we take into consideration this fact it will be

readily understood that a nontoxic dose of the substance will exercise, in a nascent state, a much more powerful effect than a poisonous one in a comparatively inert state.

The phenic acid in this compound is only sufficient in quantity to exercise its anæsthetic effect, and water acts as a vehicle or carrier, and more water may be added as a diluent.

From personal experience I am able to state that used pure, chloro-phenique does not irritate mucous surfaces, and when these suppurate the process soon stops, pain diminishing and inflammation subsiding. This is particularly noticeable in connection with the vagina, acute or chronic vaginitis, leucorrhœa, etc., which bear ample testimony in their rapid amelioration, to the value of this agent.

As a disinfectant chloro-phenique acts rapidly and efficiently and it is particularly valuable in this respect used as an injection diluted with water, say one to four in the form of vaginal douches after parturition. Should the lochia be fetid, the disagreeable odor is soon dispelled, the vaginal mucosa recovers tone and the entire post-parturient period is rendered easy and comfortable to the patient.

I do not wish to dilate further upon the subject, but, before closing, I desire to state that the degree of dilution of the preparation is to be determined largely by the condition which is present. While it is not irritating, it is not absolutely necessary to use it pure in all cases, and this very fact is a proof of the efficiency of the remedy. Any one, however, after a very limited experience, can regulate this matter to his own perfect satisfaction and obtain results which will be both satisfactory and gratifying.

Exit Prof. Amick.—Dr. W. R. Amick, "Prof. of Ophthalmology and Otology" in Cincinnati Medical College, in consequence of his having gone bodily over to the quacks by the publication in the *Lancet-Clinic* of his "Chemical Cure for Consumption," with a list of certificates a la almanac, has by the trustees of the college been requested to resign. Dr. Chas. N. Dodd has been appointed in his stead. It is thought the Cincinnati Medical Society will expel him. The publication referred to was slipped in on the *Lancet-Clinic* unawares, at least, so we are informed by a reliable exchange.

Correspondence.

QUININE IN LABOR.

In one of the medical journals lately I saw an article under this heading. I have used quinine in labor for the last ten years and have invariably met with success. I have had several cases where the os was rigid and indicated a long and tedious labor when by the use of one or two large doses of quinia, say four or five grains at a dose, it was soon followed by relaxation of the os and a speedy labor, the pain in neither of the cases where it was used were severe, but regular until the labor was brought to a successful termination.

I prefer it to ergot; it leaves the patient in a better condition. Where used I never saw any alarming hæmorrhages. I believe that I have used it in forty cases in some of whom in previous labors there was considerable trouble from prolonged and irregular uterine contractions. Sometimes on the start if I get there at the commencement of labor where the woman is troubled with what we might call false pains, or preliminary pain which wear on the patient I have given a dose of morphine with the happiest results, from the eighth to the fourth of a grain, stopping those pains which in from half to an hour is followed by those forcing pains which soon do the work. If any of my medical brothers will try this and after the pains begin to come, after a lull from the morphine, will follow it up with quinine they will be rewarded with a happy result.

WM. HENRY, M. D.,

Harmon, Lee County, Ill.

The Indiana Medical Journal has passed into the hands of a stock company. Dr. Frank C. Ferguson, its former editor and publisher, has retired and in the future Drs. Alembert W. Brayton and Theodore Potter will attend to the editorial end of our Hoosier cotemporary.

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EDITORIAL NOTES.

ADMISSION OF MINISTERS TO ISOLATION HOSPITALS is a matter discussed by the *Lancet* which states that a difficult question in Guildford has been raised by the Rev. Reginald Fowler—namely, the right of a Roman Catholic priest or any other minister to visit his people at any time while they are inmates of an isolation hospital. He not only maintains the reasonableness of this rule, but gives letters from the authorities of the Metropolitan Asylums Board and other institutions to show that any clergyman wishing to visit a patient would be admitted. Mr. Fowler writes to the *Surrey Advertiser* complaining that he has been informed by the medical officer in charge that he cannot be admitted to see patients unless they are on the point of death and by his permission. The question is a delicate as well as a difficult one. The Committee of the isolation hospital support their medical officer and defend their rule. One remark is obvious, that the question raised is not one of liberty of conscience at all; liberty of conscience is not invaded in the least. The Catholic patient has his Catholic priest, and the Protestant patient has his minister according to his own choice. It is simply a question of expediency. The object of an isolation hospital is isolation—namely, the reduction of the chances of conveying infection. The priest should be admitted whenever necessary, but not unnecessarily. The medical officer should not be rigid in sanctioning the visits of ministers of religion. On the other

hand, ministers of religion should not expect the same liberty to visit in an isolation hospital which they have in a private house. Their visit may carry risk to outsiders, it may be injurious to the patient himself, and it may disturb other patients. According to our view, the medical officer of a public institution and the minister of religion should consult together in this matter, and should have no difficulty in safeguarding the interests of all the patients.

SICK NURSING is handled in a very positive manner by Virchow. Where the state controls and subsidizes hospitals, many difficulties occur from which our voluntary system happily exempts us. Among these is what is called the "religious question in nursing." Occasionally differences have arisen from time to time in one or other of our hospital establishments, but the strength of our voluntary system is that it admits of great variety and individual adjustment; so that each form of opinion finds the opportunity of development and representation at one place or other, and in its own appropriate form. In Paris the forcible intervention of the municipality has been a great source of heart-burning and dispute, which is not yet allayed, the religious sisterhoods having been evicted from most of the hospitals. In Berlin the same conflict is arising, and in the course of a recent debate in the Berlin Municipal Council, Professor Virchow is reported to have said: "Everybody knows how the struggle between creeds and creedlessness has developed in our days, and how it is constantly becoming keener. Everybody knows that creeds claim supremacy in the tending of the sick, but we are profoundly interested in keeping away this conflict from the sick bed, and in permitting the spirit of humanity alone to assert itself there. It is not easy effectually to accomplish this, but the community can and ought to interfere positively in this matter, for it establishes numerous hospitals, and thus has an opportunity for providing for the training of sick nurses without regard to creed. No patient is asked of what religion he is, but is only examined to ascertain whether he is ill and needs to be received into such an institution. Similarly, the sick nurses, who self-sacrificingly devote their services to the sick, ought to be shielded from all religious controversy. We must also not overlook the private tending of the sick in the city, and by means of our schools for sick

nurses in the hospitals we ought to provide persons who will protect patients from the intrusion of religious arrogance. I remark, however, that I am far from accusing religious attendants on the sick of inhumanity or deficient sense of duty." This naturally gives great umbrage to the orthodox and Ultramontane journals, who discuss this utterance with bitter indignation, and complain that, while spoken in the name of freedom, it savors of intolerance.

THE PROSPECTS OF MEDICAL WOMEN is being discussed at quite some length according to the *British Med. Jour.* Dr. Julia Mitchell has commenced in *Woman* a series of articles indicating "what women may do in the medical profession," and commencing with their prospects and personal qualifications. We have read the paper with not unsympathetic curiosity, which, however, the information given does not go far to satisfy. "Everything," the writer thinks, "seems to point to a very brilliant future being in store for medical women," but not much is said as to how far such prospects are in course of being fulfilled for the rank and file. Starting hospitals and adding to the number of dispensaries are only the creation of tools. But what of the general experience of medical women as to the demand for their services? That women are born invalids, according to Mitchell's theory, Dr. Julia Mitchell stigmatises naturally enough as "all nonsense." But she admits it to be a curious fact, whatever may be the reason, that up to the present "women have shown no overwhelming desire to monopolise the accouchement branch of practice." She indicates it as a common mistake—not, we may add, not peculiar to women—that women, once qualified, think they have only to put a brass plate on the door and patients will come flocking and guineas pour into their hands. There are good and well paid posts in India open to women; but this lady remarks thereon that the climate suits few, and she thinks that "the majority of the coming English lady doctors will prefer to stay at home and try their luck." We are not convinced of the wisdom of that preference; nor does this writer give any reassuring facts or statistics in support of her cheery opinion that the chances of medical women, especially in this gigantic and ever growing city of London are "very favorable." We are sorry to note that she thinks the medical code "a wonder-

fully complicated and abstruse affair." We are under the impression that it is very simple and straightforward, based on the one "golden rule" of doing as one would be done by and that it only becomes difficult when, instead of trying to conform to it, the effort is made to evade it or break it down while seeming to observe it. Dr. Mitchell, however, warns her colleagues: "Woe to the man or woman who transgresses it!" If they continue to act upon that advice in spirit as well as letter—and in this they have excellent examples in the foremost of their body—they will find the observance both easy and pleasant, and all can join in wishing them material as well as ethical success.

Microscopy.

The Final Chapter of the Fuchsinophile Plastidule.—This will be given to our readers in the *MEDICAL AND SURGICAL JOURNAL* for July. The great length and value of the "Practical Biology" given in this number precludes its appearance in the June *JOURNAL*. F. L. J.

Practical Microbiology.—II.*

Prepare in advance a saturated alcoholic solution of each color, and when needed for use a few drops in a watch crystal full of water will give you the necessary stain. Keep the dry anilin colors, in the meantime in well closed boxes or bottles, for the anilin colors in general are as alterable as they are brilliant, that light decomposes them, not only when in state of solution, but while they are still in pulverulent form, and when subjected to it in the course of a few months they lose their staining properties¹ and become as insoluble as charcoal.

A good rule is not to prepare too much stock at once. Renew your solutions frequently. This much said let us return to our

BACILLUS TUBERCULI.

A pinch of gentian violet dissolved in plenty of alcohol, a solution similar to crysoidin are all the stains that you

*By Dr. Paul Raugé. See *ST. LOUIS AND MEDICAL JOURNAL* for May.

1. Dr. Raugé is mistaken in this statement as regards the great bulk of aniline colors, and more especially as regards those mostly used in biological work. The translator has stocks of eosin, fuchsin, vesuvin, aniline blue, etc., that has been kept in glass vials, in diffused light for several years, and which have apparently not altered a particle. It is best, however, to be on the safe side and keep such stock in a moderately dark place. F. L. J.

need. A little sulphuric acid cut with three volumes of water makes your bleach, and one per cent. aqueous solution of ammonia carbonate is your mordant—that is to say the liquid that is to be added to the violet solution to make sure of the proper impregnation of the bacillus and to fix the stain there. Note that all these solutions will keep indefinitely when properly cared for. Note too that Ehrlich's liquid (aqueous solution of oil of anilin) needs to be renewed only once a week.

You are not ignorant of the fact that all methods of preparation of tubercle bacilli, since the primitive one of Koch, depend upon the unique behavior of this organism toward the anilin colors. Instead of throwing itself on to these colors, as it were, and eagerly absorbing them like the greater part of the balance of the microbes do, it refuses to take them, at least when they are presented in simple aqueous solution. Certain artifices are necessary to arouse in *bacillus tuberculi* this property of absorption. Prolongation in the bath, the application of heat, etc., do not suffice; it is necessary to produce the reaction by the aid of the mordant of which I just spoke, viz.: a one per cent. aqueous solution of sodium carbonate.

This bacillus is distinguished not only by this peculiar behavior towards stains, but possesses another characteristic, viz.: *when it once absorbs these colors it refuses to part with them*, a fact that first enabled Koch to his chromatic differentiations of the tubercle bacillus. When a colored preparation of material has been made and it is submitted to the action of a strong acid, the latter bleaches everything except the tubercle bacilli, which then appear colored on a transparent base. If now we submit the preparation to a new bath of some strongly contrasting color to that of the bacillus and devoid of the mordant, the back ground absorbs the stain while the bacillus remains unaffected, and we thus obtain a polychrome preparation which is exceedingly easy to interpret. Among the histological and pathological debris and even among myriads of other bacilli, we see the bacillus of tuberculosis glowing with the color originally used. It alone takes and holds the primitive tint, affirming its specificity by this infallible reaction. But one other micro-organism shares the characteristic, and that is the *bacillus lepræ* of which there could be no question in tests of sputum. We are, therefore,

now ready to apply these general facts, and to prepare our slide.

Take some of the material to be examined—a very, very small quantity, mind you, because we always get too much—and mash it between two cover glasses, moving the latter to and fro until an infinitely thin layer of the material is obtained. Now separate the cover glasses, and let them dry,² and then pass them twice or thrice rapidly through the flame of an alcohol lamp, to make the substance adhere more strongly to the glass.³

Pour a cubic centimeter of the ammoniacal solution into a little porcelain or glass capsule and add to it eight or ten drops of the saturated gentian violet solution. In this mixture the tint of which should be very strong and deep, place your cover-glasses, and apply heat until the first signs of ebullition make their appearance, and keep the temperature at this degree for, say, one minute. Take out your cover glasses, wash in plenty of water and drop them into a watch glass full of acid mixture. Don't be afraid of leaving them there too long, as ten or twelve seconds will be required to completely bleach them. After this, rinse the covers thoroughly and then plunge them into a crysoidine solution and let remain for one minute. Withdraw, wash with water and let dry. When entirely dry (be careful on this point) apply a little Canada balsam⁴ to a glass slip and set the cover-glass to place.⁵ Rest assured that if bacilli are present they have not escaped staining even though it was your first experience.

The method I have just described is Roux's modification of Hermann's (of Liége). It is a great improvement on that of Ehrlich, showing the bacilli with remarkable distinctness. It is also more simple and rapid, but has the disadvantages of not being very permanent. If you desire you can replace Hermann's method by that of Neelsen; the principle is the same, the progress identical. The bleach is always sulphuric acid, but the gentian violet is replaced by magenta red (fu-

2. Not necessary. If one is in a hurry, the glasses may be passed through the flame at once. F. L. J.

3. To coagulate and render the material insoluble in the liquids into which they are about to be put, would be the proper explanation. F. L. J.

4. I prefer a solution of dammar resin in benzol which quickly clears the slide and sets more rapidly than balsam. F. L. J.

5. Or a drop of glycerine may be used for temporary examinations. If bacillus tuberculi is found, and you desire to make a permanent mount of the preparation, wash off the glycerine with plenty of water, let the cover dry thoroughly and then mount as indicated above. F. L. J.

chsin), the ammonia carbonate by a five per cent. solution of carbolic acid, and the ground color (crysoidin) by methyl blue. This stain shows the bacilli colored red on a blue ground.

OTHER MICRO-ORGANISMS.

As I remarked before the differentiation of Koch's bacillus is the most difficult of all. The process for showing the balance of the pathogenetic bacilli are almost infantile in their simplicity. Two or three drops of an alcoholic solution of violet, or red, or methyl blue, dropped into a watch glass full of water make the stain. The cover glass is allowed to remain in it four or five minutes, is taken out, washed, dried, mounted and examined. The microbes have taken the color while the back ground remains clear or so slightly stained as to let the former be easily seen. This is about all that the majority of pathogenetic microbes require. Thus we can demonstrate the diptheria bacillus, the bacillus of typhoid, of anthrax, the spirillum of cholera, all of the micrococci of supuration can be shown by this simple process.

GONOCOCCUS NEISSER.

"What about the gonococcus?" why I will tell you how to prepare it as well as M. Neisser, its father can. Just spread thinly over the cover glass a layer of the suspected pus and let dry, then drop on it a single drop of saturated alcoholic solution of anilin violet (violet BBBBB). After a contact of sixty seconds wash with plenty of water. Your preparation is finished. If the diplococcus is there you will find it burrowing amid the interior of pus corpuscles, along side of the paler nuclei, like the granulations that we see when we hold a ripe gooseberry between the eye and the sun. You may be thus assured, sufficiently at least, to know the proper treatment for timid Lyceans or doubtful husbands. As a verdict of specificity it is at any rate, a more decisive than the labored "confessions" or inventions, with which we are usually regaled on such occasions.

THE OPTICAL INSTRUMENTS.

"That is all right," says my friend, but in order to see all this, one must needs have a perfect instrument. A bacteriological microscope is necessary, and the modern catalogues are absolutely frightful in respect to these instruments. M. Zeiss who sets the fashion in these affairs proposes ruinous combinations, and the simplest of them cost from 500 to 1000 marks

(\$125 to \$250). That which is most in vogue, that which M. Koch declares to be the very least that will answer, attains a most distressing figure for us practitioners. Why I saw an English catalogue recently where a single objective is quoted at 80 guineas (\$400).

"But, you already have a microscope, have you not?" I ask.

"O yes—a sort of one that cost me a couple of hundred francs, good enough to examine a favic hair or to count blood corpuscles with." It is good enough, and will answer all requirements. All bacteriologues are not so lucky. It is quite as easy to distinguish *staphylococcus pyogenes aureus* as to count blood corpuscles. You do not need apochromatic objectives, compensating eye-pieces, an Abbé condenser, a mechanical stage—not even an iris diaphragm. Add to your stand a condenser with a short focus,⁶ an Abbé lamp (if you choose to call it so, though it was devised by Dujardin before Abbé came into the world). As to objectives a good No. 7 of Nachet or Vericks make—

"Just what I have got. But I thought that to tackle these problems of modern microscopical science a $\frac{1}{12}$ or $\frac{1}{18}$ homogeneous immersion was necessary."

"Well—I have nothing to say against the $\frac{1}{12}$ or $\frac{1}{18}$. When well made they are of inestimable value, giving grand and precious results. You, however, who desire simply to determine, clinically, the presence of a microbe, not to establish its intimate structure, its biological changes, etc. Your simple dry No. 7 will show you all of the pathogenetic microbes yet discovered. The magnification of the picture given by it can be increased should you desire it, by the use of deeper oculars, No. 2 or even No. 3, but you should not go beyond that, or you will lose in definition what you gain in amplification."

Do not forget that colored preparations demand an intense illumination and that is where the advantage of the Abbé condenser comes in, it has a large angle of aperture, and the illumination given by it has the effect of showing the colored parts of the preparation lying on a colorless fluid. It annuls, so to say, the image of the whole structure to the profit of

6. An ordinary half inch objective properly centered makes a most excellent condenser. By manipulation of the light and interposition of little metallic discs cut out of thin metal (such as is used in photography,) all the effects of an Abbe condenser are easily obtained.
F. L. J.

the stained portion. When you wish to see the microbes in their natural state, living perhaps, you must suppress the condenser, or attenuate its effects by the use of the diaphragm with which it is provided. Such an examination, however interesting and useful to the biologist, has little place or value in clinical work. Adopt and follow the staining methods before suggested. It is the true clinical method and while it may deform the microbes slightly, exaggerates or diminishes perhaps, their dimensions it reveals their presence with a neatness and certitude that leaves nothing to be desired. —“Hold on! Dont say any more, you have converted me and I am going to run home and make a beginning right now.”

Et finem fecit ambulandi et loquendi.

Dermatology and Genito-Urinary Diseases.

Pruritus Vulvæ.—Dr. Kholmogoroff cured a case (*Med. Rec.*), of severe pruritus vulvæ by six applications of galvanism of ten to fifteen minutes' duration, and ten to fifteen milliamperes strength of current. The positive electrode, insulated to its distal tip, was introduced four or five centimetres within the vagina, while the cathode, covered with chamois and moistened with a salt solution, is applied over the affected area.

A Remedy for Urticaria.—It is an observed fact that urticaria frequently occurs in individuals affected with asthma. Having noticed the good results obtained in cases of asthma, by the internal use of iodide of potassium, Stern (*Muench. Med. Woch.*), has applied it with success in cases of chronic urticaria. He prescribes it in the following manner.

℞ Kali iodidl.....3j.

Aquæ distillat.....℥v.

M.

Sig. A tablespoonful three times a day.

To avoid iodism five to ten grains of bicarbonate of soda may be taken two hours after each dose of iodide of potassium solution has been administered.

Lanolin in Cutaneous Irritation.—In order to relieve the itching in measles, scarlet fever and chicken-pox, R. Klein (*Therap. Monatsh.*), employs with considerable success a lan-

olin ointment containing a large amount of water, and of the following composition :

R Lanolin. puriss. Liebreich anhydr.....	3j.
Vaselin. Americ.....	3iij.
Aqua destill.....	3v.
Misce terendo, fiat unguentum.	

The ointment should be applied three times a day, and, owing to the large percentage of water it contains, a gradual evaporation of the included water occurs after application, and causes a pleasant cooling sensation on the surface of the skin. Klein states that the ointment is absolutely free from irritating properties and is readily absorbed.

Sources of Syphilitic Infection.—Dr. Rassler, in his essay for the M. D., of the University of Kiel, makes a valuable contribution to the literature of syphilitic disease. The *Archiv für Dermatologie und Syphilis* states that Dr. Rassler undertook the labor of analysing 630 cases of syphilis treated in the medical clinic with the object of ascertaining the number arising from extra-genital infection. He found thirty-four such cases, comprising twenty-three of the lips, one of the tongue, two of the mucous membrane of the mouth, and three of the mamma. In three instances the primary sore occurred on the genital organs without connection having taken place, and in the remaining two it was impossible to indicate the locality. The result of these investigations shows that five per cent. of all cases of syphilis are due to extra-genital infection. According to other authorities, the proportion varies between one and ten per cent. except in certain parts of Russia, where the proportion is said to reach as high as eighty or ninety per cent.

Treatment of Sebaceous Cysts.—Lutz (*Monatshefte fuer Praktische Dermatologie*), after speaking of the method of treating sebaceous cysts by excision as being almost universally regarded as the ideal way of dealing with these tumors, states that in small cysts this method is easy, but in larger growths the little operation demands a disproportionate amount of time and trouble. If the cyst-wall be very thin, as it is apt to be about the eye and in the cheek, the operation becomes still more difficult. For such cases he suggests a simple and equally efficacious method. This method substitutes incision with subsequent destruction of the sac-wall in the place of ex-

cision. This plan is especially to be commended in those cases where a steatoma has already suppurated. The writer relates two cases in which suppurating sebaceous cysts were treated by first incising and emptying them, and then scraping them out with a sharp spoon, following this by the application of tincture of iodine. In one of these cases the incision was healed with a small linear scar in twenty-four hours. After several years there was no tendency to reformation of the cyst. The method by incision can usually be made equivalent to excision, as often in scraping out the contents, the cyst-wall will come away at the same time, or, failing this, slight traction with forceps will frequently remove it. In any event a thorough application of iodine will destroy it. The author strongly recommends this treatment in all small, thin-walled cysts.

A Case of Syphilitic Reinfection.—The following interesting account of what would seem to be an undoubted case of syphilitic reinfection is published by Professor Alexis Pospelow of Moscow. A patient, towards the end of October, 1882, fourteen days after exposing himself to the liability of syphilitic infection, noticed a sore of the size of a lentil in the sulcus behind the glans penis. He was seen by Professor Tarnowsky, who diagnosed a hard chancre, and ordered the local application of mercurial ointments. On December 20, a well marked eruption of syphilitic roseola appeared on the body, and, there now being no doubt as to the correctness of the previous diagnosis, he was placed under treatment by mercurial inunction. Shortly afterwards mucous patches appeared on the fauces mouth, and lips, for which iodide of potassium was prescribed; but this produced such violent diarrhoea that its use had to be discontinued. The mercurial treatment was kept up until the end of March, when the rash and ulceration of the throat had disappeared. However, in May he had a troublesome attack of palmar psoriasis, for which he was recommended to resume the inunctions, and to visit the sulphur baths, at Piatigorsk in the Caucasus. Upon his return to Moscow three months afterwards, no trace of his former attack could be found. In spite, however, of this freedom from symptoms, he spent the summer of 1884 at Piatigorsk, and resumed the mercurial treatment. In the autumn he again returned to Moscow, and remained under supervision for the

next two years. As there was during this period no appearance of any relapse, he was given permission to marry, which he did in 1886. Nine months afterwards a healthy child was born, and both the mother and infant remained in good health during the whole period of lactation. Subsequently he separated from his wife in consequence of matters not connected with his health, and remained so for three years. Unfortunately, towards the end of this period he again ran the risk of infection, and contracted a double chancre at the root of the penis, followed by sore-throat and roseola. The case was seen by several medical men, and was considered to be undoubtedly one of reinfection.

O-D.

Excerpts from Russian and Polish Literature.

Salicylate of Bismuth in Infantile Diarrhœas.—in the *Meditzinskoie Obozrenie*, No. 6, 1892, p. 531, Dr. Mikhnevitch emphatically recommends the treatment of protracted diarrhœas in children under two years of age by the internal administration of salicylate of bismuth, after the formula:

R	Bismuthi Salicylici.....	gr. xxiv.
	Gummi Arabici.....	℥ i.
	Sacchari albi.....	℥ iss.
Terendo adde		
	Aquæ destillatæ.....	℥ ij.
Fiat lac. Tum adde		
	Aquæ destillatæ.....	℥ vi.

M. D. S. To shake well before using. To give from one to two teaspoonfuls from three to six times a day.

Each teaspoonful of the mixture contains about one-half grain of the salicylate, which represents a normal individual dose (repeated three or four times daily) for an infant aged from six to eight months. The bottle should be kept in ice or cold water (to prevent nausea, sometimes produced by the salicylate). In emaciated children the remedy, in largest doses, is apt to induce profuse perspiration, accompanied by general weakness. Hence, as soon as the sweating appears, the dose should be correspondingly diminished. In recent cases (of a few days' standing) the salicylate is useless.

On Combination of Acute Exanthemata.—At a recent meeting of the Towarzystwo Lekarskie Warszawskie (Warsaw Medical Society), Dr. L. A. Wolberg communicated (*Gazeta Lekarska*, No. 17, 1892, p. 374) a highly rare instance of a simultaneous occurrence of scarlatina and small-pox in the same subject. A sickly boy, aged seven, was first attacked by scarlatina. A few days later the temperature rose still further, while there cropped out variola pustules on the shoulders and subsequently on the chest, extremities, neck and face. Ultimately the boy completely recovered from both of the diseases.

During a discussion, Dr. A. J. Malinowski related the following series of cases of combined exanthemata from his practice:

I.—A child of three fell ill with small-pox. Twenty days later there appeared scarlatina, associated with diphtheria.

II.—A child, aged eight, was attacked with scarlatina, on the fifteenth day small-pox made its appearance.

III.—A child, three years old, contracted measles; on the nineteenth day small-pox supervened.

IV.—A child of three and a-half was found to be suffering from measles on June 16. On July 7 the patient contracted erysipelas. On September 19 another attack of measles occurred, to be followed, on September 22, by scarlatina, and, on October 7, by small-pox. The infant died.

V.—A child, aged eight, was admitted with measles on February 27. On the next day the rash became complicated with small-pox, while on March 3 there supervened scarlatina with diphtheria. On the tenth day after admission the child died.

Physiological Effects of the Hunyadi Janos Water.—

As is known, the Hungarian mineral water (which is consumed in the yearly dose of about 6,000,000 bottlefuls in Europe alone) is the richest of its kind, the proportion of sulphate of soda and magnesia amounting to 3.2 per cent. (1.6 per cent. of Na_2SO_4 ; 1.6 of MgSO_4). In view of a total absence of any scientific information on the subject, Dr. Mikhail V. Sirotkin, of Professor V. A. Manasseïn's clinic (*St. Petersburg Inaugural Dissertation*, Series of 1891-92, No. 18, p. 34), has undertaken an elaborate course of physiological experi-

ments, his chief object being to elucidate the influence of the popular laxative water on the assimilation of fats. The observations were conducted on eight persons (seven men, including himself, and one woman), aged from twenty-three to thirty-six, of whom four were perfectly healthy, while the other four were suffering from intestinal atony, with habitual constipation, bad appetite, hæmorrhoids, etc. In each case, the experiment lasted for twelve successive days, being divided into two equally long stages, during one of which the subject was taking one hundred cub. cent. of the water twice daily, all other conditions remaining as identical as possible from the beginning to the termination of the experiment. The dietary consisted of butcher's meat, milk, butter, bread, sugar, tea and drinking water.

The following are the principal conclusions drawn from the research :

1°. Under the influence of the Hunyadi Janos water, both in the healthy and in subjects with intestinal atony, the assimilation of food fats is invariably lowered. [In the healthy, during the control period, the assimilation averaged 96.586 per cent. of the fats ingested; during the Hunyadi Janos period it sank to 93.844, the decrease, therefore, amounting to 2.742. In the atonic persons, the respective figures were 97.083; 93.819; 3.264].

2°. The bodily weight decreases. [In the healthy the total loss oscillated from one hundred and eighteen to four hundred and fifty-eight grammes, averaging two hundred and sixty-nine; in the atonic, from one hundred and fifty-nine to two hundred and thirty-nine, averaging one hundred and ninety-four and five-tenths].

3°. The quantity of fæces increased.

4°. That of the urine is diminished.

5°. Its sp. gr. rises.

6°. The appetite and the general subjective state considerably improve.

7°. It is highly probable that the bitter water intensifies the nitrogenous metamorphosis (in virtue of its containing the said sulphates, as well as chloride of sodium, whose proportion amounts to one and five-tenths grammes per one litre).

8°. In view of its depressing the assimilation of fats, and its intensifying the nitrogenous metabolism, the Hunyadi

Janos spring will, probably, prove to be a valuable curative means in cases of general obesity, in which it should be combined with general hot baths and such like agents similarly tending to increase the proteid metamorphosis.

9°. The bitter water is taken by patients very readily.

Syphilis Insontium.—A long series of instructive cases of a non-venereal syphilitic infection has been communicated at a few recent meetings of the St. Petersburg Russian Syphilidological and Dermatological Society. Thus, Dr. A. I. Büdügoff (*Vratch*, No. 1, 1892, p. 22) reported a case of a clerk of twenty-three with hard chancre of the lower lip, the infection having been contracted through a promiscuous smoking of cigarettes with two syphilitic mates of his. The foolish patient had been aware of their having the disease. Dr. I. P. Reshetnikoff (*ibid.*, No. 5, p. 118) showed a man with primary sclerosis on the back of the neck. The lesion developed at the site of, and three weeks after, wet-cupping, which had been resorted to by the patient on account of headache and performed by a Finnish woman "with whitish crusts on her lips." Dr. M. S. Usass (*ibid.*, No. 10, p. 246) demonstrated a married woman of forty-one with hard chancre of the right tonsil and posterior pillar. The patient's husband had had syphilis two years previously. Dr. A. I. Büdügoff (*ib.*) presented a recruit, aged twenty-four, with primary syphilitic erosion of the right tonsil and adjacent surface of the posterior pillar. When departing to the ranks from his native village, the young man, in accordance with the Russian custom, had "kissed every one and all of them"—including all syphilitic inhabitants. Drs. Lewy and Goldberg have reported (*ibid.*) the following batch of cases from their recent hospital practice: I.—Hard chancre of the lower lip in a man of thirty, an upholsterer. II.—Ditto of the left anterior faucial pillar in a peasant woman of thirty-five. Contracted from an infant, two years old, with congenital syphilis. III.—Ditto about the left nipple of a married woman of thirty-five, a stocking-knitter. IV.—Ditto of the upper lip in a spinster of thirty-three, a domestic servant. V.—Ditto in a married woman of thirty-five. VI.—Ditto in a spinster of twenty-two, a cook. VII.—Hard chancre of the left tonsil in a spinster of twenty-six, a laundress. VIII.—Ditto of the upper lip in a married peasant man, aged forty. Had been in the habit of

smoking cigarette-stubs picked up on the street. IX.—Hard chancre of both of the nipples in a married woman of twenty-five. X.—Hard chancre of the lower lip in a married laborer, aged twenty-eight. XI.—Ditto of the left tonsil and adjacent edge of the anterior pillar in a spinster of fifty, a gardener.—Dr. F. A. Strauch (*ibid.*, No. 14, p. 356) has communicated a case of an inn-waiter of thirty-seven with primary sclerosis of the lower lip. Dr. A. S. Serduekoff (*ibid.*) has related a case of a young man of twenty-three with hard chancre of the right tonsil, and another of a man of twenty-five with a primary syphilitic erosion on the right side of the soft palate. Both of them had contracted the infection from a common smoking of cigarettes in company with syphilitic comrades. Dr. H. J. Lewy (*ib.*) has reported a case of a *virgo intacta* of sixteen, a laundress, with primary sclerosis on the right side of the soft palate. Dr. M. A. Tchistiakoff (*ib.*) has detailed a case of a youth of twenty, a pupil of a boarding-school, who came to him with hard chancre of the upper lip, roseola, etc. The lesion had been first noticed by the young man on January 28. During the subsequent three weeks he remained in the usual contact with other pupils. On February 20 he contracted mumps and was admitted to a general ward of the school's infirmary. The nature of the labial ulcer was recognized therein about March 20, when there developed secondary syphilitic manifestations. [We would not feel surprised to learn subsequently that the case has been followed by an epidemic of syphilis insontium at the school in question. It seems generally—at least, as far as Russia is concerned—that “syphilis of the innocent” threatens to become a matter of daily occurrence even in towns. However, a non-venereal syphilization does not appear to be so very uncommon in other countries, besides Russia—for instance, in Austria. Thus, Professor Neumann has just published in the *Internationale Klinische Rundschau*, April 10, 1892, a series of ninety-eight cases of the kind, observed by him in the course of the last ten years.—REPORTER.]

Berne, Switzerland.

VALERIUS IDELSON, M. D.

A monument is to be erected to the memory of the late Samuel David Gross, who was probably the most able exponent of American Medicine and Surgery.

Medical Progress.

THERAPEUTICS.

Aristol in Chapped Nipples.—Vinay (*Wien. Med. Presse*) recommends a twenty per cent. aristol ointment as useful in chapped nipples. After suckling, the base of the nipple is firmly grasped so as to open out the cracks, which are then brushed with the ointment.

Anuria of Scarlatinal Nephritis.—Dr. Starr is said (*Med. and Surg. Rep.*) to recommend the following mixture as efficacious and as one which acts readily :

℞ Ext. fld. jaborandi.....℥ss.
Potass. citratis.....℥ij.
Aque destillat.....℥ij.

M.

Sig.: A teaspoonful every four hours.

Of course, the dose of jaborandi and of citrate of potassium is to be varied according to the age of the patient.

Aphthous Stomatitis.—The following formula is given in *l' Union Médicale* :

℞ Potassium chlorate.....℥j.
Hydrolate of tilleul.....℥ij.
Hydrolate of mint.....℥j
Simple syrup.....℥x.

M.

Sig.: To be given to children in teaspoonful doses in aphthons and ulcer-membraneous stomatitis.

In addition to this the mouth should be cleansed with a two to three per cent. solution of bicarbonate of soda.

Efficient Remedies in Dysentery.—The following we find in the *Medical World*: Copious antiseptic irrigations of the colon. Avoid nitrate of silver except in sub-acute or chronic cases.

Pulverized ipecac, given dry, in doses of twenty to sixty grains. Dover's powder may be substituted in some cases with advantage.

Bichloride of mercury, 1-1000 to 1-100 grain hourly, in solution.

Sulphate of magnesia, with sulphuric acid, in sufficient hourly doses to produce catharsis.

Tincture of aconite in conjunction with any of the above treatment, while distinct febrile symptoms last.

Ointment for Burns.—The following is recommended as an efficacious remedy by Siebel:

℞ Europhen	gr. xlv.
Olei olivæ	gr. cv.
Vaselin	℥ij.
Lanolin	℥j.

M.

The writer has found the following not only useful but cooling and soothing:

℞ Campho phenique	℥iv.
Lanolin	
Ung. aquæ rosæ	℥ā.....℥j.

M.

In addition to its soothing and healing properties it is also antiseptic.

Neurasthenic Headache.—According to Dr. Allan McLane Hamilton, headaches are quite various as well as varied. The "neurasthenic" group includes a long list of irregular headaches of obscure origin, but dependent more or less upon conditions of neural weakness; many are due to eye strain, many to ovarian or uterine disorders, but in most cases no cause can be discovered. So recourse must be had to general measures. The bromide of caffeine is often serviceable. The following formula is recommended:

℞ Ammonii carbonatis	℥iij
Tinct. moschi	℥vj
Spts. lavandulæ	℥j
Elix. ammonii valerianatis	℥vii

M.

Sig.: Two teaspoonfuls at a dose in water.

The most efficacious preparations for continuous treatment are those of the restorative class. A pill of arseniate of strychnine, strophanthus and quinine may be tried with expectation of great benefit, thus:

℞ Strychninæ arseniat	gr. ss
Sem. Strophanth	gr. vj
Quininæ sulphat	℥ijss

M.

Ft. pilulæ no. xlvij.

Sig.: One or two after each meal. Ethereal acetate of iron may be administered one hour after the meal with great advantage in many cases.

Treatment of Simple Laryngitis in Infants.—Dauchez (*Rev. Gén. de Clin. et de Thér.*) discusses the treatment of an accident of simple laryngitis in infants. While admitting that simple laryngitis seldom gives rise to alarming symptoms, he observes that occasionally in its course, generally about the third day after the commencement of simple catarrhal symptoms, the infant is seized with suffocative symptoms, which may appear to call for immediate tracheotomy. The diagnosis from diphtheria is not always easy, but a history of exposure to cold can generally be obtained; there is no membrane in the throat, and signs of general coryza are present. The sudden onset of suffocative symptoms during the night is held to be rather characteristic. The treatment of the case should consist at first in the administration of an emetic, and the employment of local fomentations. If after a few hours there is no improvement, and the dyspnœa is increasing, it is advisable before proceeding to tracheotomy to try the effect of the local abstraction of blood by means of a leech over the front of the neck. Mustard poultices to the legs may also be of service, and it will commonly be advisable to give frequent doses of stimulants. The temperature may be little, if at all, above the normal unless there is some pulmonary complication.

Petroleum in Diphtheria.—At a meeting of the Academy of Medicine of Belgium (*Sem. Med.*) a communication was presented on behalf of M. Larcher, embodying the results which he had obtained with crude petroleum in the treatment of diphtheria. Since 1886 he has employed this method in forty-two well-marked cases, false membranes, swelling of the glands, etc., of which only two died; one of these was a very young child, in whom the disease was far advanced before the treatment was begun; the other was a girl aged six, who was so unmanageable as to make the application of the method almost impossible. In the forty successful cases the disease was, as a rule, in the second or third day when the treatment was commenced. The petroleum was applied with the brush, and it was also used as a gargle every two hours; in some cases sprays of carbolized water were employed concurrently with it. The treatment brought about rapid softening and detachment of the false membranes; when reproduced they were less thick and less extensive than before, and the mucous

membrane soon became healthy. In seven cases paralysis of the velum was observed. The petroleum caused no disagreeable effects; patients only complained of the taste when the disease was nearly cured. The duration of the treatment was from eight to eighteen days. In not one of the forty-two cases was diphtheria communicated to any other person. One advantage of the method, according to Larcher, is that any other treatment can be combined with it.

PATHOLOGICAL AND PHYSIOLOGICAL NOTES.

Melanosis.—A rare case of multiple melanotic growths has been described by W. Kriwusha before the Russian Medical Society of St. Petersburg. The patient had a large number of subcutaneous nodules distributed over the whole body. They were freely movable, indolent and melanotic, varying in size from a pea to a hazel-nut. The urine became black three times. Post-mortem examination disclosed an alveolar sarcoma at the root of the right lung and in a number of bronchial glands. Metastatic tumors existed in various other parts, as well as melanotic growths in different organs. Pigmentary deposits existed in all the organs, in the connective tissue spaces, and in the endothelium of the perivascular spaces. There was no pigment in the blood and very little in the spleen. The author states that the absence of pigment in the blood and the fact that the lymphatic glands took no part in the process argued against its metastatic nature. In his opinion these melanotic growths are of the type endothelium and the sarcoma in the lung, in the case reported, was perhaps the cause of the melanotic growth, although not to be regarded as such itself.

Hyperæsthesia of the Cranial Bones.—Benedikt (*Intern. klin Rundschau*), remarks on the importance of examining the cranial bones for undue sensitiveness, as a proceeding analogous to testing for spinal tenderness. He describes a form of cephalalgia in which pain and tenderness are confined to the cranial sutures. He has found this "suture neuralgia" in persons subjected to prolonged worry and overwork, in some nervous disorders such as Basedow's disease, and in persons at the age when the sutures are ossifying. He cites the case of an overworked youth, aged nineteen, in whom convulsions suddenly developed and quickly ended in death.

Hæmorrhagic pachymeningitis was diagnosed but the chief necroscopic discovery was acute synostosis of the cranial sutures, proceeding from within outwards. In a man, aged thirty-one, affected with atrophy and paralysis of the left half of the tongue, paresis of the right labial muscles, formication in the right arm, and occasional speech troubles, Benedikt discovered great hyperæsthesia of the left half of the base of the skull, including the accessible portion of the orbital roof, and the left half of hard palate. Taken with the other symptoms he was inclined to consider this hyperæsthesia as a pathognomonic indication of bulbar affection. Unilateral hypersensitiveness of the cranial base is often present, he finds, in old-standing migraine.

Psilosis (Sprue).—This common and fatal disease is endemic in hot climates, and until recently was considered (*Hosp. Gaz.*), to be merely a peculiarly intractable form of "tropical diarrhoea." It is due to the ravages of a peculiar bacterium the pathogenic development of which is believed to be rendered possible by an acid condition of the intestinal tract, the secretions of which are normally alkaline. However this may be the first symptom of the disease is a peculiar raw condition of the tongue (known in Ceylon as "Sore Tongue"). Then it spreads down the alimentary canal, giving rise to anorexia, vomiting and acute diarrhoea, with light yellow frothy motions. It resists all medicinal treatment and goes on for years, the patient gradually withering away from sheer inability to digest and assimilate nourishment. Under favorable circumstances the stools may regain a certain consistency, but they remain white, though *post mortem* examinations show that neither the liver nor the pancreas are involved in the morbid process. The only effectual treatment is a rigid milk diet, persisted in for weeks or months. There was a very interesting discussion on the subject at the last meeting of the Royal Medical and Chirurgical Society in which ex-Indian medical officers took a large part. The subject was introduced by Dr. Thin, who seems to have worked out the pathology of that hitherto obscure disease with praiseworthy and fruitful assiduity.

DISEASES OF WOMEN AND CHILDREN.

Epispadias in Woman.—The following case is reported by M. Auffret (*France Médicale*): A girl of nineteen, affected

with congenital incontinence of urine, upon examination disclosed a peculiar condition of the urethra. There was a transverse slit, absence of the upper wall of the urethra as also of the clitoris and prepuce. There were only indications of the labia minora on the lateral portions. The distended hymen permitted the escape of a cylindrical tumor which was recognized as a prolapsed uterus. An operation was suggested the first portion of which was performed. This consisted in denuding two lateral triangular areas having the urethra for bases and the flaps brought forward of the meatus or rather of the slit which took its place. The patient was thus enabled to hold the urine to a certain extent, but another operation would be necessary to obtain a satisfactory result.

Rapid Induction of Abortion by the Curette.—Dolérís (*Annales de Gynéc.*, March, 1892), read a paper on this proceeding at a recent meeting of the Obstetrical Society of Paris. A young married woman, subject to advanced aortic disease from childhood, became pregnant, and, as was expected, the gravest symptoms developed from the first; dyspnoea, rapid hypertrophy and displacement of the heart, insomnia, and alarming syncope during vomiting. At the end of two months the patient was very cachetic. Immediate induction of labor seemed necessary as there was, over and above the symptoms just noted, great anæmia. The os was dilated with laminaria tents, and the gravid uterus scraped with the curette. In less than thirty-six hours abortion occurred, and the patient recovered and did well. In the discussion on Dolérís' case, it was observed that statistics proved how severe heart disease did not necessarily affect the prognosis of pregnancy so very gravely. M. Guéniot mentioned three cases in which women with organic disease of the heart bore their children to term in repeated pregnancies without any marked aggravation of the cardiac affection. Dr. Porak believed that the great point of importance in these cases was the state of the endocardium.

SURGERY.

Trichinosis of the Tongue.—Ortiz de la Torre (*Rev. de Med. y Cir. Pract.*) reports the following case. A man, aged fifty, of robust constitution and without any trace of organic lesion, had an ulcerated tumor on the tongue which had commenced some ten or twelve months previously as a small ulcer. This had gradually increased in size, without, however, causing much pain or inconvenience; there had never been any hæmorrhage, and the general health was in no way impaired. The ulcer was crateriform in shape, with everted edges, the base being of fibrous appearance, uneven, and perfectly clean. As there was neither history nor sign of syphilis or tuberculous, the disease was judged to be epithelioma. The cleanness of the ulcer and the absence of glandular enlargement induced Ortiz de la Torre to try "diagnostic" treatment

for a fortnight, after which, as there was no improvement, the tongue was removed, the patient making an excellent recovery. Microscopic examination showed that the disease was not epithelioma, but trichinosis, the process having caused sclerosis and ulceration of the tissues around the cysts. The author thinks the mistake of no practical importance, as removal was indicated in either case.

Operative Treatment of Empyema.—Rosenbach (*Deut. Med. Woch.*) says that resection of rib is only necessary when, as very rarely happens, the ribs overlap and lie upon each other, or when the empyema is of long standing (over six months). In the latter case the pleural cavity must be diminished in size by a thoracoplastic operation. In operating upon empyemata, the author makes an incision four or five centimetres long, and puts in two stout-walled drainage tubes. In fifteen cases recently treated by him, the average duration was six weeks, and in the two last only three weeks and a half. With regard to exploration, Rosenbach says the disadvantage is that a negative result gives no reliable information. After the needle is introduced, the piston should be drawn back for a third of the distance, and the instrument withdrawn while the piston is maintained in this position. If the piston is allowed to spring back, not only may the one or two drops of pus in the needle be lost, but other healthy parts infected. The contents of the needle are then examined microscopically. If pus cells are present, operation may be undertaken, or further exploration with a larger needle. In puncture of the intestine or of fetid cavities, the importance of not allowing the piston to spring back is obvious.

The Cæsarean Operation: A Suggestion.—Dr. J. H. Danber writes as follows to the *Lancet*: The risk of fatal peritonitis supervening upon Cæsarean section, especially when the foetus is putrid, might it appears to me, be greatly reduced if the operation were performed in two stages, instead of one as at present. Other abdominal viscera and some intra-peritoneal abscesses are commonly treated in two operations when a communication with their interior for some purpose has to be established, and I would suggest a similar method of dealing with the uterus in Cæsarean section. At eight months and a half an incision through the abdominal wall sufficiently large to admit of the withdrawal of the foetus might be made, and the edges of the wound accurately and carefully stitched to the uterus, as to the stomach in gastrotomy. Then at full term, when adhesions around the wound had shut out the peritoneal cavity, the second operation of opening the uterus and delivering might be performed with the minimum of risk as being extra-peritoneal. I do not think the after-treatment would be rendered more difficult.

Post-partum hæmorrhage could be as easily controlled as at present. The adherence of the uterus to the abdominal wall might interfere with uterine contraction and complete sub-involution—to what extent experiment alone would decide; but as adhesions between the uterus and the abdominal wall generally form after Cæsarean section, the uterus would doubtless adapt itself in some way to its new anchorage. The uterine and abdominal incisions could be closed simultaneously at the second operation, drainage being arranged by the cervix or abdominal incision, at the discretion of the operator. Further details of the operation would have to be considered.

Book Reviews.

Disease of the Eye. A Hand-Book of Ophthalmic Practice, for Students and Practitioners. By G. E. DE SCHWEINITZ, M. D. Royal 8 vo., pp. 641. With over two hundred wood-cuts and two chromo-lithographic Plates. [Philadelphia: W. B. Saunders, 1892. Price Cloth, \$4.00, Sheep, \$5.00.

Within the past few years, the author of this work has been one of the most prolific writers on ophthalmology in this country. He has amassed a large amount of experience and as a result of this accumulation of rich material of the most valuable nature, we have the present volume presented to us. It is a comprehensive treatise upon the subject with which it deals.

The general plan of the book is practical, and the methods of examining eyes and the symptoms, diagnosis and treatment of ocular diseases and refractive defects are everywhere brought into prominence. Attention is called to the following points:—

I. The systematic directions for recording each case of ocular disease and for making the examinations necessary to lead to an accurate diagnosis, beginning with direct inspection of the eye and passing in review one method of precision after the other until all the functions of the organ have been investigated.

II. The careful explanation of the two methods of ophthalmoscopy, and the cautions which help the student to use the ophthalmoscope properly and prevent him from falsely interpreting its findings.

III. The judicious classifications of the various diseases of the eye facilitating their study, together with useful tables for differential diagnosis.

IV. The symptom grouping, which, with each important general disease, precedes the special symptoms of the various types, *e. g.*, in glaucoma, cataract, iritis, choroiditis, retinitis, optic neuritis, etc.

V. The careful pointing out of the indications for treat-

ment, and the detailed methods of treatment, both medical and surgical.

VI. The explicit directions for preparing a patient, the hands of the surgeon, the dressings, and the instruments preparatory to an operation, and the detailed description of the steps of the important operations.

VII. The selection of the illustrations (nearly one-third of which are new), which materially facilitate the understanding of the directions.

Dr. James Wallace has done some excellent work in this book in his contributions on general optical principles, refraction, astigmatism, the adjustment of spectacles, reflection, the ophthalmoscope and other kindred subjects directly relating to optics and the connections of that science with ophthalmology.

Dr. Edward Jackson has made an important contribution on the subject of retinoscopy which is an excellent and practical description of this method of determining refractive error. As the author is justly regarded as a master of the subject, it can not fail of being interesting, more especially, as it is illustrated by examples and original drawings.

The entire work shows much painstaking effort and is arranged in such a systematic manner as to render it most helpful and to those desirous of becoming acquainted with the diagnosis and treatment of diseases of the eye. As an introductory to the more systematic and comprehensive study of ophthalmology, it will prove a most excellent and thorough manual. To the general practitioner it will serve the purpose of a reliable guide in all those cases which do not require especially expert or trained experience. Moreover, the conditions requiring such are so clearly set forth that he will know what he should not attempt.

The mechanical portion of the book is unexceptional. The paper, type, and binding are of the best. The illustrations are numerous and, in great part, original. The chromolithographic plates are above the usual average and altogether we can state that the book reflects credit upon the author and publisher alike.

A Text-Book of the Practice of Medicine for the Use of Students and Practitioners. By R. C. M. PAGE, M. D., Professor of General Medicine and Diseases of the Chest in the New York Polyclinic, Etc., 8vo. pp. x, 557. [New York: William Wood & Co., 1892.]

A work from the pen of one who has written a most excellent book upon physical diagnosis commands attention. The dainty yet substantial volume will add to the author's reputation for thorough and careful writing. Those who are engaged in teaching graduates in medicine know their needs, and while there are many text-books suitable for under grad-

uates which contain the theory which should be mastered by them before they are competent to take up their practical work, but few books fill the requirements of the physician in active practice. The author, from his position, knows that the facts of pathology, that have a direct bearing upon clinical work are the only ones which are desired by the practitioner; these this work gives clearly and concisely. It is particularly full in symptomatology while the methods of physical exploration are clearly explained. The natural history of disease is well written and yet it is not extended beyond the limits of thorough study. Here there is no attempt to pad the book with the recital of cases, which one so frequently finds in works of this kind. A recital of cases belongs to journal articles not in systematic text-books. The weak point of almost all works upon clinical medicine lies in the treatment; there is great temptation to follow the usual accepted lines or on the other hand to give only the author's personal views. In this work, the writer, with his class of graduates constantly before him, knowing that all other departments of clinical medicine are subservient to a clear conception of the treatment, has paid especial attention to therapeutics. He gives the accepted theories in regard to the treatment of diseases, giving credit to the masters in the department, yet one finds a strong individuality on every page. Although he employs the remedies now generally in vogue yet he accepts no one's "sayso" unless he has personally tested the method. In this way this book is very valuable.

It is not likely that any work can fully meet the approbation of a teacher of graduates, for one so engaged always modifies, from his own hospital and private practice, the views entertained by others but this volume comes more nearly to the ideas of the reviewer than any of those who aim to write a work for the undergraduate as well as for the practitioner. In the first one expects to find subjects for modification in later editions. We hope that the classification of heart murmurs in the future will avoid such terms as presystolic and substitute therefor more accurately descriptive designations as auricular systolic, that the word diastolic will have a definite descriptive adjective ventricular prefixed. We presume that our author does not intend to state that leucocythæmia is due to malarial disorders and we believe that pernicious fever should be qualified by the adjective malarial.

The plates are in the main excellent, showing clearly what it is intended that they shall portray, the one giving the normal and dilated stomach seems open to criticisms in that the lesser curvature is not so much in the long axis of the body as the anatomical researches of Dwight would indicate. In later editions, we shall expect to find the means for relief of the disorders of the digestive system more fully discussed and particularly the subject of intestinal antiseptics.

The author has given to the profession a valuable work that is likely to add greatly to his fame and one that is, without doubt, to be accepted as a text-book particularly suited to the needs of the practical physician. We bespeak for it the cordial reception that it deserves and feel assured that it will pass through many editions.

R. W. WILCOX.

Practical Midwifery. A Handbook of Treatment. By EDWARD REYNOLDS, M. D. 8vo. pp. 424. With twelve Illustrations. [New York: William Wood & Co., 1892. Price, \$2.50.]

This work is almost *sui generis*. It is an exposition of the technical details of obstetric practice. There is but little time devoted to the discussion of theoretical questions and is to the obstetrical treatise, want a dissector is to a work on anatomy. The minor details are given with a clearness such that the dullest student cannot fail to comprehend them.

The author has adopted a somewhat dogmatic style and intentionally so he informs us, "in the belief that a clear description of one justifiable plan of treatment is likely to be of more immediate benefit to an inexperienced practitioner than an extended discussion of the relative advantages and disadvantages of many methods."

The work is quite complete, dealing with pregnancy, labor, obstetric surgery, abnormal labor, the pathology of labor and the puerperium. The elaboration of the subjects takes up twenty-eight chapters and a clearer presentation is facilitated by a large number of good illustrations derived from various sources as well as original.

The press-work is excellent, the paper of an extra good quality and the binding handsome. This last is a red parchment muslin, the edges of the covers being beveled. The entire appearance is inviting and in keeping with the character of the contents so far as thoroughness, good quality, and attractiveness are concerned.

Correction.—In the article by W. E. F. Biewend, in this number, he is made to appear as the nephew of Koch whereas he is the cousin of the celebrated bacteriologist.

A Law has recently passed the Senate creating new titles for army medical officers. Officers of the medical corps holding the rank of colonel will hereafter be designated as assistant surgeon-generals, and those holding the rank of lieutenant-colonel will hereafter be known as deputy surgeon-generals. Titles similar to these exist in the British army medical corps.

Literary Notes.

The Scarlet Letter which is considered Nathaniel Hawthorne's masterpiece and a representative of American prose fiction has been put to a novel use by the well-known paper makers, Vernon Bros. & Co., of New York. They have distributed the book gratis to advertise six different weights of paper upon which it is printed. As a sample of the stock it certainly is ingenious and has the advantage of being one which will be preserved.

American Men of Eminence, Series No. 2, has been issued by the Arlington Chemical Co., of Yonkers, N. Y. This second issue fully sustains the standard set in the first series and it contains life-like portraits of eminent Americans who have made their mark in the various professions. Those who have received the first series will certainly desire the second. Any physician will have this interesting collection sent to him by writing to the firm issuing it, free of cost.

Cerebral Localization is almost a terra incognita to the majority of physicians, but a chart illustrating the principal points of this obscure subject has been recently issued by the Dios Chemical Co., of St. Louis. The chart is based upon the researches of Messrs. Victor Horsley, Beever and Schæfer. The areas being in different colors greatly facilitates an easy understanding. Any physician desirous of obtaining a copy can do so by addressing the above-mentioned firm.

Pamphlets Received.—The following pamphlets and reprints have been received during the past month and the senders will please to accept our thanks therefor:

A Study of the Sputum in Pulmonary Consumption, by E. L. Shurly, M. D. (Reprinted from the *Climatologist*, Dec. 1891); Tuberculin: The Value and Limitation of its Use in Consumption, by Charles Denison, A. M., M. D. (Reprinted with revisions up to date, Feb. 1, 1892, from Trans. Col. State Med. Soc. for 1891); Phthisis and its Dosimetric Treatment, by Dr. Adolph Burggraefe (Translated from the French, 1891); La Grippe—Origin and History, Treatment, by V. W. Gayle, M. D. (Reprint from *Medical World*, Oct. 1891); An Account of the Influenza as it appeared in Philadelphia in the Winters of 1889-90 and 1891-92, by J. Howe Adams, M. D. (Reprinted from the *University Medical Magazine*, Feb. 1892); Treatment of Laryngeal Phthisis, by Robert Lay, M. D. (Reprinted from the *Medical and Surgical Reporter*, 1891); A Neglected Case of Chronic Pleurisy, by Wm. H. Dukeman, M. D. (Reprinted from *Pacific Medical Journal*, Feb. 1892);

Athetosis: With Clinical Cases, by Archibald Church, M. D. (Reprint from *Chicago Medical Recorder*); Insanity as Related to Civilization, by Orpheus Everts, M. D.; Aphasia due to Sub-Dural Hæmorrhage without external Signs of Injury: Operation, Recovery, by L. Bremer, M. D., and N. B. Carson, M. D. (From *Am. Jour. Med. Sc.*, Feb. 1892); Tobacco, Insanity and Nervousness, by Dr. L. Bremer. (Published by Meyer Bro's *Druggist*, 1892); Atresia of the Genital Tract, by Florian Krug, M. D. (Reprint from Vol. xvi *Gyn. Trans.*, 1891); Obstetric Problems: being an Inquiry into the Nature of the Forces determining Head Presentation, Internal Rotation, and also Development of the Amnion, by D. T. Smith, M. D. (Louisville, 1892); Total Extirpation, versus Leaving a Stump in Operation for Uterine Fibro-Myomata, by Florian Krug, M. D. (Reprinted from *N. Y. Gyn. and Obst.*, Jan. 1892); Trendelenburg's Posture in Gynecology, by Florian Krug, M. D. (Reprint from *Trans. Ass. Am. Obst. and Gyn.*, 1891); The Civilized Method of Infant Feeding, by Elliott E. Furney, M. D. (Reprinted from the *Medical Fortnightly*, Feb. 15, 1892); Report of Committee on Ophthalmology and Otology, by Geo. H. Powers, M. D. (Reprint from *Pacific Med. Jour.*, May, 1891); A Contribution to Spinal Cord Surgery, by Archibald Church, M. D., and D. W. Eisendrath, M. D. (From *Am. Jour. Med. Sc.*, April, 1892); Oxygen as a Distinct Remedy for Disease and a Life-Saving Agent in Extreme Cases, by A. W. Catlin, A. M., M. D. (Reprinted from *Brooklyn Med. Jour.*, Aug. 1891); Laparotomy under Cocaine, by Emory Lanphear, M. D., Ph. D. (Reprint from *Kansas City Medical Index*, 1892); The Indications for Colotomy, by Charles B. Kelsey, M. D. (Reprinted from *Ther. Gaz.*, Jan. 15, 1892); Clinical Lecture—Tenotomy, by Open Incision for Talipes Equinus: Torticollis from Rheumatoid Arthritis: Subcutaneous Tenotomy of Sterno-Cleido-Mastoid for Torticollis, by H. Augustus Wilson, M. D. (Reprinted from *Am. Lancet*, Feb. 1892); The Pathology of Hip-Joint Disease, with Illustrated Cases, by H. Augustus Wilson, M. D. (Reprint from *Med. and Surg. Rep.*, 1892); Tenotomy by Open and Subcutaneous Incision, Tubercular Synovitis and Osteitis of Shoulder, by H. Augustus Wilson, M. D. (Reprinted from *Ther. Gaz.*, Feb. 15, 1892); Supracotyloid Dislocation, by John Ridlon, M. D. (Reprinted from *N. Y. Med. Jour.*, May 23, 1891); Second Annual Report of the New York Pasteur Institute; First Decennial Catalogue of the Chicago College of Physicians and Surgeons, 1881-1891, and the announcement for 1892-1893; Reaction of the Amide-Group upon the Wasting Animal Economy, by Prof. Samuel G. Dixon, M. D., and W. S. Zuill, M. D., D. V. S. (Reprinted from *Times and Register*, Sept. 26, Oct. 17, 1891, and Feb. 6, 1892); Announcement of the Twenty-Ninth Annual Course of Lectures of the Medical Department, University of California, 1892; Lanolin, A Com-

pilation of the Works on Lanolin, published, 1885-1890; Eighteenth Annual Report of the Superintendent of the Cincinnati Sanitarium for the year ending, Nov. 20, 1891; Fourteenth Annual Report of the Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore; Empiricism—Rational, Practice—Practice under Guidance of Law, by Charles S. Mark, M. D. (Reprint from *N. Y. Jour. Hom.*, Jan. 1892); The Library of the Bristol Med. Chir. Soc.; On Some of the Features Contributory to the Development of Bright's Disease, by L. Bremer, M. D. (Reprinted from the *Med. Fortnightly*, Jan. 15, 1892).

Society Proceedings.

PETTIS COUNTY (MO.) MEDICAL SOCIETY.

SEDALIA, Mo., April 4, 1892.

Regular meeting Pettis County Medical Society; the President, Dr. G. H. Scott, in the chair. Number of members present six.

Dr. E. C. Evans reported the case of a boy two and half years old, who had scarlet fever. The case progressed in usual way. After desquamation the child was exposed to cold and relapsed with pleuro-pneumonia. In few days found an accumulation in left chest. Aspirated twelve ounces pus. One week later there was a reaccumulation and an incision was made followed by discharge of sixteen ounces pus. Since that time patient has improved rapidly.

Dr. S. K. Crawford read a paper entitled "Gall-stones and some of their consequences." The etiology, diagnosis and treatment received special attention. (See page 355).

In discussing the paper, Dr. E. C. Evans said he relied upon morphine and hot applications; had no confidence in prophylaxis.

Dr. G. H. Scott said gall-stones were largely due to catarrhal condition of gall-bladder and ducts. Recommended anodynes, hot stupes and alkaline physics. Sweet oil not rational.

Dr. L. Shadburn said must look beyond the liver for the etiology. Catarrhal condition tended to cause formation of gall-stones. There was abundant evidence to prove the efficacy of sweet oil.

Dr. J. W. Trader said high livers and intemperate persons were most subject to gall-stones. Had seen no case of death from gall-stones. Had given chlorodine in his last case with good results.

Dr. S. K. Crawford, in closing the discussion related a case in which post-mortem demonstrated extensive catarrh of ducts without any indication of gall-stone.

Society adjourned by motion.

GEO. E. McNEIL,
Secretary.



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